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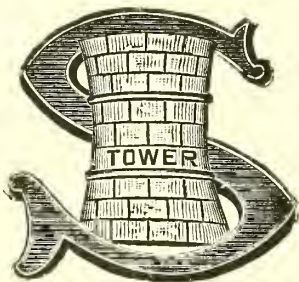
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Brunner, Mond & Co., Lim.
Burgoyne, Burdidges & Co.
Davy, Hill & Son, Yates & Hicks
Evans, Lescher & Webb
Evans, Sons & Co.
Goodall, Backhouse & Co.
Howards & Sons (Pharm.)
Lofthouse & Saltmer
Macfarlan, J. F., & Co.
May & Baker, Lim.
Merk, E.
Sanitas Co., Lim.
Scottish Acid & Alkali Co., Ltd.
Smith, B. A., & Co.
Smith, T. & H., & Co.
Tyke & King
Tyrer, T., & Co., Lim.
Voss, Walter, & Co.
Washington Chemical Co.
White, A., & Son

CHEST PROTECTORS

Liverpool Patent Lint Co.
Maw, S., Son & Thompson
Solport Bros.
Wood, Vincent

CHLORIDE OF LIME

Hebden, W. C.
Steele, J. C., & Co.

CHLOROFORM

Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
Smith, T. & H., & Co.

CHLORODYNE

Davenport (Browne's)

COCAINE-HYDRO.

Boehringer, C. F., & Soehne
Howards & Sons
Merk, E.

COCA WINE

Burroughs, J., Lim.
Evans, Lescher & Webb
Stephen Smith & Co., Lim.
(Hall's)
Wilcox & Co., Lim.

COCOA & CHOCOLAT

Cadbury Bros.
Fry & Sons
Van Houten
Vi-Cocoa (Dr. Tibbles')

COD-LIVER OIL

Allen & Hanbury's
Baiss Bros. & Stevenson
Burroughs, Wellcome & Co.
Evans, Lescher & Webb
Evans, Sons & Co.
Goodall, Backhouse & Co.
Harker, Staggs & Morgan
Kemp & Son
Lofthouse & Saltmer
Randall & Son
Smith, T. & H., & Co.
Spratt's Patent (Dog Cakes)
Scott's Emulsion
Southall Bros. & Barclay

COLLAPSIBLE TUBES

Christy, T., & Co.
Marshall, Lim.
Vigo, Jules, et Cie.

COMP. MEDICINES

Allen & Hanbury's
Burroughs, Wellcome & Co.
Keene & Ashwell
Leo & Co.
Lloyd, T. Howard, & Co.
Mantons & Hopkinson
Parke, Davis & Co.

CONCENT. LIQUORS

Baiss Bros. & Stevenson
Fletcher, Fletcher & Co.
Lloyd, T. Howard, & Co.
Robinson, B.

CONFECTIONERY

Gibson & Sons
Guest, T., & Co.
Hillbays, Lim.

CORKS

Pinagrese & Cobb

CRUSHED LINSEED

Mumford, G. S.

DENTIFRICES, &c.

Beecham, T.
Hovenden & Sons
Jewsbury & Brown
Stevens, P. A.
Sutton, O., & Co.
Woods, W. (Arecia Nut)

DENTISTRY

Browning, A. J.
Fentiman, A. J., & Co.
Spencer & Son

DISINFECTANTS

Calvert, F. C., & Co.
Fussell Bros.
Fletcher Bros. & Co.
Hobden, W. C.
Izal
Jeyes' Sanitary Compounds
Co., Lim.
Ray Bros., Lim.
Mackey, Mackey & Co.
Major & Co., Lim.
Alison Bros. & Chapman
May & Baker, Lim.
Mayor, Geo., & Co.
Morris, Little & Son, Lim.
Sanitas Co., Lim.
Steele, J. C., & Co.
Tomlinson & Hayward
Tyrer, T., & Co., Lim.

DOG MEDICINES, &c.

Spratt's Patent, Lim.

DRUGGISTS' SUNDRS.

Ayrton & Saunders
Barclay & Sons, Co., Lim.
Bleasdale & Co., Lim.
Burge, Warren & Ridley
Deoual, J., & Co.
Evans, Lescher & Webb
Evans, Sons & Co. (Savars)
Fassett & Johnson
Fordham, W. B., & Sons, Lim.
Gilbertson, H., & Sons, Lim.
Headakine, Lim.
Hovenden & Sons
Ray Bros., Lim.
Kelpion Co.
Marshall, Lim.
Maw, S., Sons & Thompson
May, Roberts & Co.
Newbery, F., & Sons
Parkes, J., & Co.
Quelch, H. C.
Roberts & Sheppey
Sanger & Sons
Schutze & Co.
Shirley Bros.
Sporton Bros.
Southall Bros. & Barclay
Tidman & Son
Toogood, W.
Wood, Vincent
Woolf, E.

DRUG GRINDERS

Allen, S., & Sons

DRUGS

Baiss Bros. & Stevenson
Bleasdale & Co., Lim.
Lofthouse & Saltmer
Merck, E.
Oppenheimer, Son & Co.
Wiley's, Lim.

DYES

Clawshaw, E., & Co.

EAU DE COLOGNE

Larima, J. M.
Sainsbury, S.
Van Oppen & Co.

EMBROCATION

Day & Sons
Forman Sons & Co.
Harvey & Co.
Post, A. M., Lim.
Sanitas Co., Lim.

ENEMAS

Barclay & Sons, Lim.
Evans, Sons & Co.
Lynd & Co., Lim.
Newberry, F., & Sons
Sanger & Son
Wood, Vincent
Woolley, J., Sons & Co., Lim.

ESSENCES

Allen & Hanbury
Barnett & Foster
Bush, W. J., & Co., Lim.
Fletcher, Fletcher & Co.
Goodall, Backhouse & Co.
Hay, Wm., Lim.
May & Baker, Lim.
Newhall & Mason
Stevenson & Howell
Woolley, J., Sons & Co., Lim.

ESSENTIAL OILS

Allen, S., & Sons
Baiss Bros. & Stevenson
Barnett & Foster
Bush, W. J., & Co.
Corio, F. A.
Evans, Sons & Co.
Horner & Sons
Jeuneard, Gagan & Domnin
London Essence Co.
May & Baker, Lim.
Poppelreuter, W.
Quelch, H. C.
Ransom, Wm., & Sons
Raynaud, Claude, & Co.
Sanitas Co., Lim.
Stevenson & Howell
Warrick Bros.

ETHER

Duncan, Flockhart & Co.
Howards & Sons
Macfarlan, J. F., & Co.
May & Baker, Lim.
Tyrer, T., & Co.
White, A., & Sons

EUCALYPTUS OIL

Sanitas Co., Lim.
Sharland & Co.
Tasmanian Eucalyptus Oil Co.

EXTRACT MEAT

Armour & Co.
Brand & Co.
Liebig Co.
Nelson, G., Dale & Co., Lim.

EXTRACTS FLUID

Allen & Hanbury
Allen, S., & Co.
Bleasdale & Co., Lim.
Burgoyne, Burdidge & Co.
Evans, Sons & Co.
Fletcher, Fletcher & Co.
Heaton, Squire & Francis
Lloyd, T. Howard, & Co.
Merck, E.
Parke, Davis & Co.
Potter & Clarke
Ransom, W., & Son

EXTRACTS, SOLID

Allen, G., & Co.
Nelson, G., Dale & Co., Lim.
Ransom, W., & Son

FEEDING BOTTLES

Barclay & Sons, Lim.
Evans, Sons & Co.
Gilbertson, H., & Sons, Lim.
Hovenden & Sons
Larima, J. M.
Lynd & Co., Lim.
Maw, S., Son & Thompson
May, Roberts & Co.
Moulden, E.

FILTERS

Derkfeld Filter Co., Lim.
Defries, J., & Sons

FLY CATCHERS

Alabastine Co. (British), Lim.
Chameleon Patents Mfg. Co., Lim.
Ford, Shapland & Co.
Goddon, Lim.
Ray Bros.

FOOD (Infants' & Invalids)

Allen & Hanbury
Beanes, E., & Co.
Benger's Food
Bleasdale & Co., Lim.
Bovril, Lim.
Brand & Co.
British Somatose Co., Lim.
Burgoyne, Burdidge & Co.
Coombs Flour Co., Lim.
Cosenza & Co.
"Ferochal," Squire's
Frame Food Co.
Goodall, Backhouse & Co.
Heaton, Squire & Francis
King, G., & Co.
Liebig Co.
Nelson, G., Dale & Co., Lim.
Nestle, H.
Parke, Davis & Co.
Plasmon Syndicate, Lim.
Ridgely, Dr.
Savory & Moore
Vi-Cocoa (Dr. Tibbles)
Vivoli (Bovril), Lim.
Worthing, Foods Syndicate, Lim.

FOOD (Infants' & Invalids)

Allen & Hanbury
Beanes, E., & Co.
Benger's Food
Bleasdale & Co., Lim.
Bovril, Lim.
Brand & Co.
British Somatose Co., Lim.
Burgoyne, Burdidge & Co.
Coombs Flour Co., Lim.
Cosenza & Co.
"Ferochal," Squire's
Frame Food Co.
Goodall, Backhouse & Co.
Heaton, Squire & Francis
King, G., & Co.
Liebig Co.
Nelson, G., Dale & Co., Lim.
Nestle, H.
Parke, Davis & Co.
Plasmon Syndicate, Lim.
Ridgely, Dr.
Savory & Moore
Vi-Cocoa (Dr. Tibbles)
Vivoli (Bovril), Lim.
Worthing, Foods Syndicate, Lim.

FRUIT SALT

Eno, J. C., Lim.

GELATINS, GUMS, &c.

Fink, F., & Co.
Meggett, Saml., & Sons, Lim.

GLYCERIN

Price's Candie Co., Lim.

GRANULAR PREP.

Bishop, A., & Sons
Evans, Gadd & Co.
Evans, Sons & Co.
Heaton, Squire & Francis
Lloyd, T. Howard, & Co.
Lofthouse & Saltmer
Tyrer, T., & Co., Lim.

HAIR PREP.

Alexandre, L.
Chesbrough Co.
Howards & Sons
Hoggood, W.
Thellay, E. H.

HERB BEER EXTS.

Newhall & Mason
Potter & Clarke

HOMOEOPATHIC

Ashton & Parsons
Keene & Ashwell (Perioids)
Leath & Ross
Watson & Wates

HYPOPHOSPHITES

Duncan, Flockhart & Co.
Fellows
Fletcher, Fletcher & Co.
Tyrer, T., & Co., Lim.

INHALERS

Hawkesley, T. (AmCl)
Krohn & Senn
Lynch & Co., Lim.
Newsholme, G. T. W.

INSECTICIDES

Bleasdale, Lim.
Fleming's Oil & Chemical Co.
Lim.
Jackson, T.
Taubridge & Wright

LAVENDER WATER

Newbery, F., & Sons (Berdoes)
Sainsbury, S.

LEMON PEEL, &c.

Southwell, C., & Co.
Toomey, J.

LETTER FILES

INDEX, &c.
Amberg File & Index Co.

LINE JUICE, &c.

Lids & Co., Lim.
Riddle, Alexander, & Co., Lim.

LINT

Burgoyne, Burdidge & Co.
Christy, T., & Co.
Farrington, Gibbs & Co.
Liverpool Lint Co.
Maw, S., Son & Thompson
Newsome, C.
Robinson & Sons
Wood, Vincent

LIQUORICE

Evans, Gray & Hood ("Solazzi")
Evans, Sons & Co. (Savarini)
Hillbays, Lim.
Jeuneard, Gagan & Domnin
Young & Smylie

LIQUORS

Baiss Bros. & Stevenson
Fletcher, Fletcher & Co.
Lloyd, T. Howard, & Co.
Oppenheimer, Son, & Co., Lim.

LOOFAHS

Solport Bros.

LOTIONS

Edgar's Croup Lotion

LOZENGES, &c.

Allen & Hanbury
Denoual, J., & Co.
Gibson, R., & Sons (Manfra.)
Guest, T., & Co., Lim.
Jackson, R.
Raines & Co.
Warrick Bros.

LUNG PRESERVERS

Zimmer & Co.

MACHINERY

Bennett, Sons & Shears, Lim.
Colton, Arthur
Gardner, W., & Sons
Melin, C.
Pindar, J. W.

MAGNESIA

American Magnesia Co.
Bishop, A., & Sons, Lim.
Bleasdale, W., & Co.
Henry, T., & W. (Calcined)
Lloyd, T. Howard, & Co.
Washington Chemical Co.

MALT EXTRACT, &c.

Allen & Hanbury
Burgoyne, Wellcome & Co.
Caepler & Co.
Heaton, Squire & Francis
Parke, Davis & Co.
Price's Patent Candle Co., Ltd.
Raines & Co.
Raines, Clark & Co.

MARKING INKS

Bond, John (Crystal Palace)

MEASURES

Taylor, F. H., & Co.

MEDICINE CHESTS

Burgoyne, Wellcome & Co.
Day, Son & Hewitt (Veterinary)
Day & Sons (Veterinary)

MERCURIALS

Howards & Sons
May & Baker, Lim.
Tyrer, T., & Co., Lim.

METH. SPIRIT, &c.

Boord & Son
Burrough, J., Lim.
Jones & Co. | Phillips, G., & Co.

MICROSCOPES

Darton, F., & Co. | Ross, Lim.

MILK

Nestle, H. (Condensed)

MORPHIA

Macfarlan, J. F., & Co.
Smith, T., & H., & Co.

OILS, VARNISHES, &c.

Calvert Bros. & Co.
Punchin, John & Co.
Stern Bros. (Wh te)

OINTMENT BASES, &c.

Baiss Bros. & Stevenson
Burgoyne, Wellcome & Co.
(Lanoline)
Chesbrough Co. (Vaseline)
Lloyd, T. Howard, & Co.
Resinol Chemical Co.

OXIDE OF ZINC

Baiss Bros. & Stevenson
Hubbuck, T., & Son, Lim.

PALATINOIDS

Oppenheimer, Son & Co., Lim.

PATENT AGENTS

Chapman, J. C., & Co.
Trade Mark Protection Society

PATENT MEDCNS, &c.

Anglo-American Drug Co., Ltd.
Barclay & Sons, Lim.
Beecham, T. (Pills)
Clarke's Blood Mixture
"Purisy" Headache Powders
Edgar's Croup Lotion
Edwards & Son
Evans, Lescher & Webb
Evans, Sons & Co.
Fleming (Powders)
Goodall, Backhouse & Co.
Holloway (Pills and Oint.)
Hovenden & Sons
Laplanche, C.
Lalor (Phosphodyne, &c.)
May, Roberts & Co.
Newbery, F., & Sons
Paris Medicine Co.
Post, A. M., Lim.
Richards, J. M.
White, A. J., Lim.

PEPPERMINT OILS

Bush, W. J., & Co.
Ransom, W., & Son
Stevenson & Howe

PEPSIN, &c.

Armour & Co.
Baiss Bros. & Stevenson
Burgoyne, Wellcome & Co.
Cerebros Limited (Pepsalia)
Fairchild Bros. & Foster
Merrill, W. S. Chemical Co.
Parke, Davis & Co.
Randall & Son

PERFUMERY, FANCY SOAPS

Allen & Hanbury, Lim.
Atkinson, J., & E., Lim.
Ayrton & Saunders
Barclay & Sons, Lim.
Bleasdale, Lim.
Bush, W. J., & Co.
Chesbrough Co.
Cook, E., & Co., Lim.
Corbyn, Stacey & Co.
Evans, Sons & Co.
Farrina, J. M.
Greensill & Son
Hovenden & Sons
Jeuneard, Gagan & Domnin
London Essence Co.
Marshall, S. Lim.
Muhens, F.
Newbery, F., & Sons (St. Paul's)
Parkes, J., & Co.
Pears, A. & F., Lim.
Potter & Clarke (Sachets)
Quelch, H. C.
Raynaud, Claude, & Co.
Roberts & Sheppey
Sainsbury, S.
Sanger, J., & Sons
Schutze, F., & Co.
Spurway & Cie
Van Oppen & Co.
Vigo, Jules & Co., Lim.
Vinolia Co., Lim.
West, T. (Ockell's Monna)

PESSARIES

Rendell, J. W.

PHOTOGRAPHIC X RAY, &c.

Barclay & Sons, Lim.
Burgoyne, Wellcome & Co.
Butcher, W., & Son
Cox, H. W., Lim.
Darton, F., & Co.
Evans, Sons & Co.
Harrington Bros.
Houghton, G., & Son
Lockyer, J. E.
Mackey, Mackey & Co.
Merck, E.
Newbery, F., & Sons
Raphael, J., & Co., Ross Lim.
Seabrook Bros. & Co.
Shaw & Co.
Townsend, J., & Son
Tyrer, T., & Co.
White Alfred, & Sons
Woolley, J., Sons & Co., Lim.

PEROX. OF HYDR.

May & Baker, Lim.
Sanitas Co., Lim.
Tyrer, T., & Co., Lim.

PTRLEUM JELLY, &c.

Allen & Hanbury
Christy, T., & Co.
Dee Oil Co., Lim.
Hatriek, James L., & Co.
Snowdon, Sons & Co. (Ld. Jelly)
Steru Bros.

PHARM. PREPS.

Allen & Hanbury
Armour & Co.
Baiss Bros. & Stevenson
Barron, Harveys & Co.
Boehringer, C. F., & Sohne
British Somatose Co., Lim.
Burgoyne, Burdidge & Co.
Burgoyne, Wellcome & Co.
Davies, Gibbins & Co.
Duncan, Flockhart & Co.
Evans, Gadd & Co.
Evans, Lescher & Webb
Evans, Sons & Co.
Fairchild Bros. & Foster
Fassett & Johnson
Farris & Co.
Fletcher, Fletcher & Co.
Heaton, Squire & Francis
Headakine, Lim.
Hewlett & Son
Howards & Sons
Kelpion Co.
Lagema, C.
Lambert Pharm. aca Co.
Lofthouse & Saltmer
Macfarlan, J. F., & Co.
Mackey, Mackey & Co.
Manners & Hopkinson
Martindale, W.
May & Baker, Lim.
Merck, E.
Merrill, Wm. S., Chemical Co.
Oppenheimer, Son & Co.
Parke, Davis & Co.
Potter & Clarke, Lim.
Smith, T., & H., & Co.
Squire & Sons
Stern Bros.
Tyrer, T., & Co., Lim.
White, Alfred, & Sons
Wilcox & Co.
Willows, Francis, Butler & Thompson
Woolley, Sons & Co., Lim.
Wyley's, Lim.
Zimmer & Co.

PILL MACHINES

Bennett, Sons & Shear, Lim.
Pindar, J. W.

PILLS, Coated, &c.

Allen & Hanbury, Lim.
Beecham, Thomas
Bleasdale & Co., Lim.
Cox, Arthur H., & Co.
Davies, Gibbins & Co.
Davy, Hill & Son, Yates & Hicks
Duncan, Flockhart & Co.
Evans, Gadd & Co.
Heaton, Squire & Francis
Holloway, Professor
Keasley, C. & G.
Lloyd, T. Howard, & Co.
McKesson & Robbins
Manners & Hopkinson
Parke, Davis & Co.
Scottish Sugar-coated Pill Co.
Wand, S. Pearl Coated
Warner, W. R., & Co. (Coated)
Wyley's, Lim.

PLASTERS

Belersdorf, P., & Co.
Chesbrough Mfg. Co.
De St. Palmes, A.
Evans, Sons & Co.
Mather, W., Lim.
Seabury & Johnson
Solport Bros. (Court)

POLISHING

Bradley & Bourdas (Albatun)
Fordham, W. B., & Sons, Lim.
Oakley, J., & Sons, Lim.
Raines & Co. (Stockton)

PRINTING

Bowers Bros.
Corson, J. H. (Glass)
Ford, Shapland & Co.
Harrison & Waide
Townsend, J.

QUININE

Boehringer, C. F., & Sohne
Bucht, Chas., & Co.
Howards & Sons
Imperial Quinine Co.
Phillips, Max
Zimmer & Co.

RENNET

Duncan, Flockhart & Co.
Tomlinson & Hayward

RESPIRATORS

Wallach Bros.
Zimmer & Co.

RUBBER STAMPS

Bond, J. (Crystal Palace)
Richford, E. M.

SACCHARIN

Anglo-Continental Chemical
Works, Lim.
Sachar, Corporation on, Lim.

SALICIN

Macfarlan, J. F., & Co.
Smith, T., & H., & Co.

SAUCES, PICKLES

Goodall, Backhouse & Co.

SCHOOLS, &c.

Carson, Mr.
Central School
Charing Cross Hospital
Edinburgh Central School
Glasgow Royal Infirmary
Glasgow School (J. Lohian)
Imperial College (Davis, F.)
Leeds College of Pharmacy
Liverpool School
London College
Manchester Col. of Pharmacy
Metropolitan Col. of Pharmacy
North of England School
Northern College of Pharmacy
Owens College
Reading College
Royal Dispensary (Edinburgh)
School of Pharmacy (Brixton)
Sheffield College of Pharmacy
South London School of Pharmacy, Lim.
West of Scotland College
Westminster College

SEA SALT

Tidman & Son, Lim.

SEEDS

Potter & Clarke

SELTZOGENES

Geraut, E., & Co.

Thessier, E.

SHAVING

Hovenden & Sons (Exeter)
Lloyd, A., & Co. (A. S. Lloyd's Fuxes)

SHEEP DIP

Fletcher Bros. & Co.
Morris, Little & Son, Lim.
Sanitas Co., Lim.
Tomlinson & Hayward

SHOP FITTERS

Alstrom, C.
Ayrton & Saunders
Bowling & Govier
Bygrave, J. & W.
Ellison, F. E., & Co., Lim.
Evans, Sons & Co.
Howlett, S., & Son
Josephs, Philip, & Son
Maw, S., Son & Thompson
Parnall & Sons, Lim.
Tittensor, Geo.
Treble, G., & Son

SIZE

Meggett, S., & Sons, Lim.

SOAP

Allen & Hanburys, Lim.
Ayrton & Saunders
Bromley, H., & Co.
Calvert, F. C., & Co.
Cook, E., & Co.
Foster, M. E.
Gibbs, D. & W. (Medicated)
Milhens, F.
Peers, A. & F. Lim.
Resinol Chemical Co.
Sanitas Co., Lim.
Vinolia Co., Lim.

SPECTACLES &c.

Botwright & Grey
Darton, F., & Co.
Lawrence, Henry
Raphael, J., & Co.

SPONGES

Cohen, I. & M.
Cresswell Bros. & Schmitz
Phillips, J., & Sons

STERILIZERS

Browne & Sayer
Hawksley, T. (Milk)

STOVES

Clark, S., & Co., Lim.

SUGAR

Macfie & Sons

SURGICAL

Bailey, W. H., & Son
Barclay & Sons, Lim.
Biersdorf, P., & Co.
Burgoyne, Burdidge & Co.
Darton, Gibbs & Co.
Davol Rubber Co.
Domen Belts Co.
Eschmann Bros. & Walsh
Fassett & Johnson
Ferris & Co.
Findlay, John J., & Co.
Galeu Manufact'g Co., Lim.
Giberson, H., & Sons, Lim.
Haywood, J. H.
Krohne & Sesemann
Liverpool Patent Lint Co.
Lynch & Co., Lim.
Macfarlan, J. F., & Co.
Maw, S., Son & Thompson
Mineralized Rubber Co.
Oppenheimer, Son & Co., Lim.
Powell & Barstow
Quelch, H. C.
Robinson & Sons
Sanitary Wood Wool Co., Lim.
Schutze, F., & Co.
Spongio Filine
Wood, Vincent

STOPPERS

Austin & Co. (Sprinklers)
Barnett & Foster
Melin, C.
Spendum Stopper Co., Lim.
(Lanoline)

SYPHONS

Barnett & Foster
Camwall, Lim.
Geraut, E., & Co.
Idris & Co., Lim.
Kilner Bros. | Melin, C.

SYRUPS

Deckett, W., Sons & Co.
Fletcher, Fletcher & Co.
(Liquors)
Stevenson & Howell

TABLETS

Corsan, J. R. (Advertising)
Lamiet, A., & Co.
Roberts & Sheppy

TEA

Skirne's Chimbura Digestive
Tea
Thomas, O., & Co.
Tower Tea, Lim.

TEETHING PADS

Barclay & Sons, Lim.
Cartwright, A. S.

THERMOMETERS

Bailey, W. H., & Son
Comitti, O., & Son, Wells &
Lyon, Lim.
Darton, F., & Co.
Pastorelli & Rapkin

TINCTURES

Evans, Sons & Co.
Hewlett, C. J., & Son
Lloyd, T. Howard, & Co.
Parke, Davis & Co.
Southall Bros. & Barclay, Lim.
Wyleys, Lim.

TOBACCO & CIGARS

Barclay & Sons, Lim.
Singleton & Cole, Lim.

TRADE MARK AGENTS

Barker, Reginald W.
Chapman, J. C., & Co.
Trade Mark Protection
Society

VANILLA

Pavia, F.

TOILET

Allen & Hanburys, Lim.
Antikito Toilet Co.
Ayrton & Saunders
Burrroughs, Wellcome & Co.
(Lanoline)
Crown Crystalline Co.
Dee Oil Co., Lim.
Foster, M. E.
Hovenden & Sons
Lynch & Co., Lim.
Major & Co., Lim.
Marshall's, Lim.
Maw, S., Son & Thompson
Moseley, D., & Sons
Newbery, F., & Sons
Quelch, H. C.
Sanitas Co., Lim.
Solport Bros.
Southall Bros. & Barclay
Squire & Sons
Tidman & Son, Lim.
Townsend, J. (Paper)
Vinolia Co., Lim.

TOOTH PASTE

Beecham, T.
Biersdorf, P., & Co.
Jewsbury & Brown
Maw, S., Son & Thompson
Parke, Davis & Co.
Sutton, O., & Co.
Woods, M. (Arca)

VACCINATION

Maw, S., Son & Thompson
Vaccine Association (Lymph)

VALUERS AND

TRANSFER AGENTS

Berdoo & Co.
Brett, F. J.
Judd & Manners
Orridge & Co.
Shacklady, J.
Tomlinson, Thos., & Son

VASELINE

Chesbrough Co.

VETERINARY

Corry & Co., Lim.
Day & Son, Lim.
Day, Son & Hewitt
Elliman, Sons & Co.
Harvey & Co.
Lloyd, T. Howard, & Co.
Morris, Little & Co.
Pettifer, Stephen & Sons
Sanitas Co., Lim.
Spratt's (Dogs)
Walker, Troike & Co.
Wyleys Lim.

VINEGAR

Grimble & Co.

VINOLIA Superfatted

Vinolia Co., Lim.

WEED KILLER

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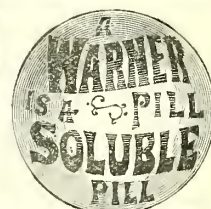
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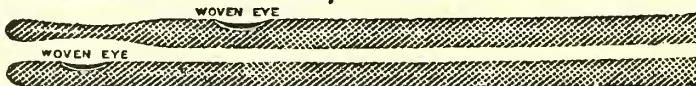
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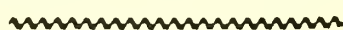
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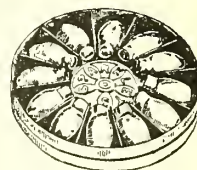
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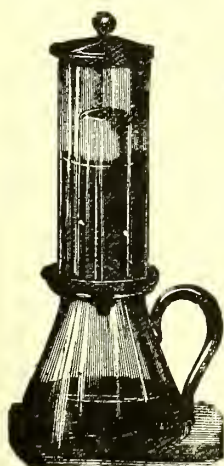
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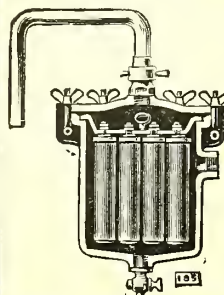


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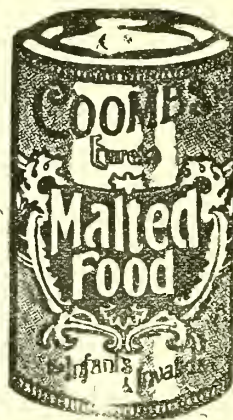
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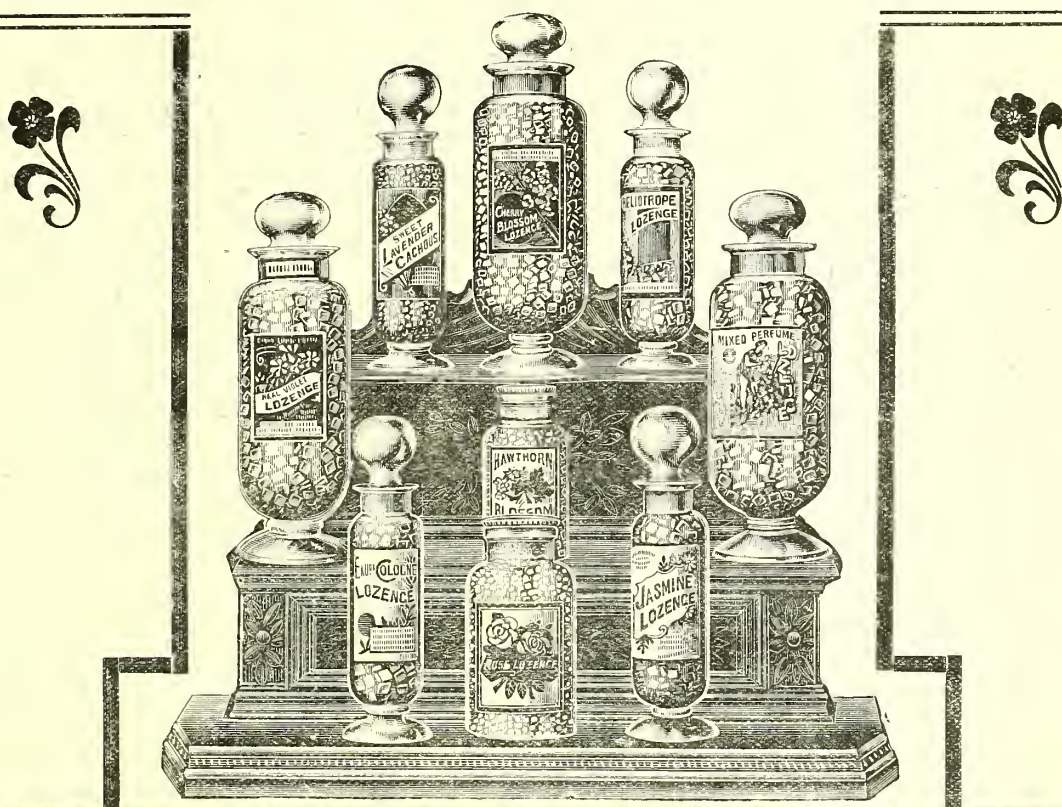
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Salad Dressing Cream	8/=		Prepared with Double Cream. "We commend the Salad Dressing Cream, a piquant and inseparable compound which is ready for use without any addition whatever." —Chemist and Druggist.

Terms: Net Cash. Carriage Paid on £5 orders.

BLEASDALE, Limited, YORK

ANNATTO.

Treble Strength and Bright.
LIQUID, CAKE, or ROLL.
Special Prices to Large Buyers.

MANUFACTURER—

J. W. BAKER (late Clements),
York St., St. Paul's, BRISTOL.

CERESINE WAX

All Colours.

In Slabs, or in Small Cakes.

CARNAUBA

(Best Bleached)

AND

RESIDUES.



BEESWAX COMPANY, LTD.
LIVERPOOL.
Telegrams—"BEEHIVE"



Quotations Free delivered to customer.

All Goods Bleached and Refined at our Own Works.

BEESWAX, B.P.

Yellow or Bleached.

In all size Cakes, from 1/2-oz. upwards.

From a . . .

BUSINESS POINT OF VIEW!

The Tradesman's true "POLICY" is to encourage and facilitate the sale of the article which offers the

GREATEST VALUE for MONEY.

The Public is appreciating the fact that

HILLABY'S

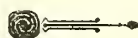
LIQVORICE WAFERS,
PONTEFRAC TCAKES,
LIQVORICE PELLETS, and
LIQVORICE & CHLORODYNE LOZENGES

ARE

"FIRST"

for PURITY !
for STRENGTH ! !
for FLAVOUR ! ! !

A USEFUL & DELICIOUS SWEETMEAT.

FREE SAMPLE on application. 

HILLABY'S, LTD., Lion Works, PONTEFRAC T.

PLASMON

Registered Trade Mark. Patented in the U.K. and Abroad.

PLASMON is an absolutely pure, soluble milk albumen, free from all chemicals, and being tasteless and odourless is capable of being used in any and every form of food. It replaces all other nitrogenous substances in the dietary of the healthy, the weak, the aged, and the young, and is used in many of the principal Hospitals. It is prescribed and strongly recommended by eminent physicians throughout the country. See *Lancet*, August 11, 1900, p. 404.

Descriptive literature will be forwarded on application.

PRICES {	Packets, each about 1 lb.,	2/6.	Plasmon Biscuits, Plain or Sweet,	Retail Trade Dis-
	"	"	tins about 1 lb.,	count 15 per cent.
	"	"	"	on orders of £1 and
	"	"	Plasmon Chocolate, at 3/- per lb.	upwards, car. paid.

THE PLASMON SYNDICATE, LIM., 56 Duke St., Grosvenor Square, LONDON, W.

THOS. GUEST & CO.

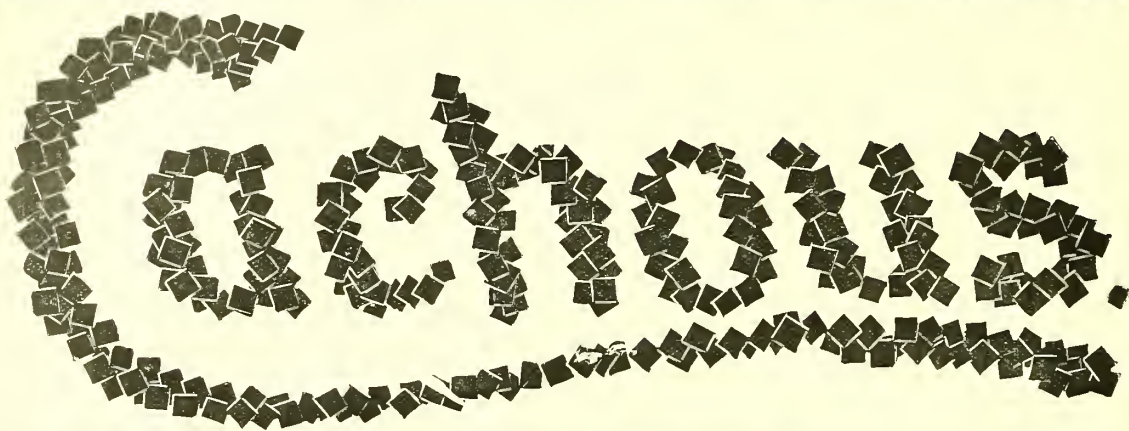
Carruthers Street, MANCHESTER.

MAKERS OF MEDICATED LOZENGES AND JUJUBES.

B.P., T.H. Ph., and General Proprietary Lozenges. Decorated Tin Cartons of 2 and 4 lbs. Linseed, Licorice and Chlorodyne—a Speciality. Finest Gum Jujubes and Pastilles—Glycerine and Black Currant, &c. Granular and all Effervescing Preparations. Boiled Sugars, Floral Tablets.

SEND FOR LIST, SAMPLES, AND COMPARE.

TELEPHONE 235. TELEGRAMS "GUESTO."



Sensation Cachous.

*The Popular American Variety.
Exquisitely Perfumed.*

On $\frac{1}{4}$ gross Cards, and in $\frac{1}{2}$ gross Glass-top Boxes, 7/- per gross.

$1\frac{1}{2}$ d. Screw-top Bottles, 2/9 per dozen, or 30/- (net) per gross.

Customer's own Name and matter put on the 4d. Bottles Free on orders of 1 gross and upwards.



The Royal Japanese Cachous.

A VERITABLE CACHOU DE LUXE.

Put up in beautifully-designed envelopes printed in colours, and packed in handsome $\frac{1}{2}$ gross Boxes. The Cachous have a distinct and delightful flavour, and cannot fail to become popular favourites.

In 2d. Packets. Price, 14/- per gross.

Write for Sample of New Flavour "Japanese Violets."



Liquorice Lozenges (new).

VIOLET, ROSE, VANILLA, ANISEED, AND PLAIN FLAVOURS.

In Cartoons, 7/- per gross.

SPECIAL NOTE.—Cachous, packed for the Home and Export Trade, in any style, with Customer's own name and special printed matter; also, where required, any particular flavour or perfume.

Samples sent, Post Free, to any part of the World.

POTTER & CLARKE, Wholesale Druggists,
60, 62, & 64 ARTILLERY LANE, LONDON, E.

Cheltine

FOODS

NOW BEING
EXTENSIVELY ADVERTISED!

These FOODS are the outcome of suggestions made to the inventor by a celebrated London Specialist on Diet, and are the result of a combination of Medical Skill, Scientific Knowledge, and Practical Effort.

CHELTINE DIABETIC FOOD.

Food 2/6 & 8/- per Tin, Biscuits 2/- per Box.

CHELTINE ANÆMIC FOOD.

Food 1/- & 2/6 per Tin, Biscuits 2/- per Box.

CHELTINE DYSPEPTIC FOOD.

Food 1/- & 2/6 per Tin, Biscuits 2/- per Box.

CHELTINE INVALIDS' FOOD.

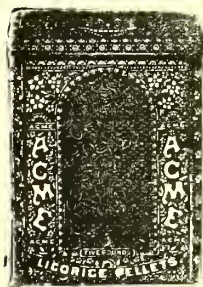
Food 1/- & 2/6 per Tin, Biscuits 2/- per Box.

CHELTINE INFANTS' FOOD.

1/- & 2/6 per Tin.

TRADE DISCOUNT 20%. TERMS—NETT CASH IN ONE MONTH. We are members of the P.A.T.A., and can only supply those who undertake not to sell under above prices. Carriage paid to all parts of the United Kingdom on parcels amounting to £1 and upwards. Cases and Boxes are returnable. An allowance of one-half is made if they are paid for.

WORTHS FOODS SYNDICATE, LTD., ^{FOOD} SPECIALISTS, Cheltine Works, CHELTENHAM.



The undersigned, who are the leading Licorice Specialty House in America, beg to announce that they have appointed

MESSRS. F. SCHUTZE & CO.

Of 89 Southwark Street, LONDON, S.E.

as their **SELLING AGENTS** in Great Britain for the Chemist's trade. They will keep on hand ample stocks of our **Corrugated Stick Licorice**—sticks averaging one ounce, packed 80 sticks to box; **Acme Licorice Pellets**, in 5-lb. glass-front tins and in 5-cent packages, 40 to box; **Licorice Lozenges**, in 5-lb. glass-front tins and in 5-lb. glass jars; **Tar, Licorice, and Tolu Wafers**, in 5-lb. glass-front tins; **Purity** brand Penny Sticks, packed 100 to box.

Y. & S. Stick Licorice (plain), 4, 6, 8, 12, and 16 sticks to lb., packed in laurel leaves, cases of 1 cwt.

We solicit through our above-named Agents an initial order for our various preparations, which we believe will appeal to the most exacting and discriminating taste.

~~~~~  
**YOUNG & SMYLYE, BOROUGH of BROOKLYN, N.Y. CITY, U.S.A.**

ESTABLISHED 1845.

**CORBYN, STACEY & COMPANY, LTD.**

Wholesale & Export Druggists,  
MANUFACTURING PHARMACEUTICAL AND ANALYTICAL CHEMISTS.

ESTABLISHED PRIOR TO THE



(TRADE MARK.)

GREAT FIRE OF LONDON.

MANUFACTURERS OF

EXT. COLOC. CO. CORBYN, LIQUOR CINCHONÆ RUB. CORBYN,  
GYNOCARDIC ACID, & CHAULMOOGRA PREPARATIONS.

BROMO CAFFEINE (Effervescent K. &amp; M.).

CALAMINE (Corbyn) No. 3, and other Calamines from Native Ore.

Sole Agents for the United Kingdom for LIEBREICH'S PEPSINE ESSENCE.

300 HIGH HOLBORN, LONDON, W.C.

City Address: 96 &amp; 98 LEADENHALL STREET, LONDON, E.C.

**ARTIFICIAL PERFUMES**

OF ALL KINDS,

Aubépine, Citral, Cillet, Heliotrope, Lilas, Muguet, Musc, Neroline, Neroli, Rhodinol, Roséol, Citral of  
Lemon, Vanilline, Violette, &c., &c., manufactured by

L. GIVAUDAN, VERNIER, near GENEVA (Switzerland).

**JAMES BURROUGH**  
(LIMITED), [1] **S.V.R.**

CALE ST., CHELSEA, S.W.

and Methylated Spirit

AT LOWEST PRICES.

Write for Quotations.

PERFECTLY PURE.

WRITE FOR OUR PRICES BEFORE ORDERING.

**S**  $\frac{0}{56}$  **V**  $\frac{0}{60}$  **R**

TINCTURE SPIRIT,

B.P. 1898 AT LOWEST PRICES.

PURE ORANGE WINE.



**S**  $\frac{0}{61}$  **V**  $\frac{0}{64}$  **M**

AT LOWEST PRICES.

Special Terms to Large Buyers.

PURE GINGER WINE.

FOREIGN WINE AND SPIRIT MERCHANTS.

SOLE PROPRIETORS OF THE FAMOUS "GLENALLAN" PURE MALT WHISKY.  
7 YEARS OLD. THE CREAM OF SCOTCH WHISKY. Per doz. 42/- Per doz.



**VASELINE** FIRST QUALITY  
(Salvo Petrolia)

**VASELINE** SECOND QUALITY

May be procured through all Chemists and Druggists,  
and is Manufactured by

**THE DEE OIL CO., LTD.**

Works:—SALTNEY, CHESTER.

**SALVO PETROLIA**

Sanctioned by the Board of Trade Marine Department, and included  
in their instructions issued May, 1894, to superintendents of Mer-  
cantile Marine Offices.

Manufactured in five distinct qualities—WHITE, LEMON, YELLOW,  
GOLDEN, and RED (Veterinary).

Packed in Tins, 1, 2, 4, 5, 7, 10, 14, and 28 lbs., 56 and 112 lb.  
Drums, and 3 cwt. Barrels.

**OLEUM DEELINÆ**

(REGISTERED).

Generally Adopted by the Medical Profession for

**OPHTHALMIA, SCURVY, RINGWORM,  
ECZEMA, and all SKIN DISEASES.**

Packed in Cases—One dozen 1s. Bottles; One dozen 2s. Bottles.  
Pint Bottles, 4s. 6d. each, for Hospitals and Dispensing Chemists.  
Testimonials may be had upon application.

# Perfumes.

As old-established Perfume Distillers we offer  
direct to the Trade our Extra Concentrated

## Floral Extracts

in glass-stoppered bottles or in tins on  
specially favourable terms. Also

Essential Oils, Perfumed Oils and  
Pomades, and Rose Water.

Guaranteed pure and the finest on the market.

Samples and Price List of

**Claude Raynaud & Cie.,**

Grasse, France,

or 7, 8, & 9 Hosier Lane, London.

## TRY IT IN YOUR BATH.

**SCRUBB'S CLOUDY FLUID AMMONIA**

**MARVELLOUS PREPARATION.**

Refreshing as a Turkish Bath.  
Splendid Cleansing Preparation for the Hair.  
Allays the Irritation caused by Mosquito Bites.  
Restores the Colour to Carpets.

Of all Chemists, Etc.

Invaluable for Toilet Purposes.  
Removes Stains and Grease Spots from Clothing.  
Invigorating in Hot Climates.  
Cleans Plate and Jewellery.

Price 1s. per Bottle.

SCRUBB & CO., GUILDFORD STREET, LAMBETH, LONDON, S.E.

**Greensill's**

**MONA BOUQUET**

*Always Sells Well.*

Now is the time to order  
in a few Dozens.

**BRECKNELL'S** PRIZE MEDAL

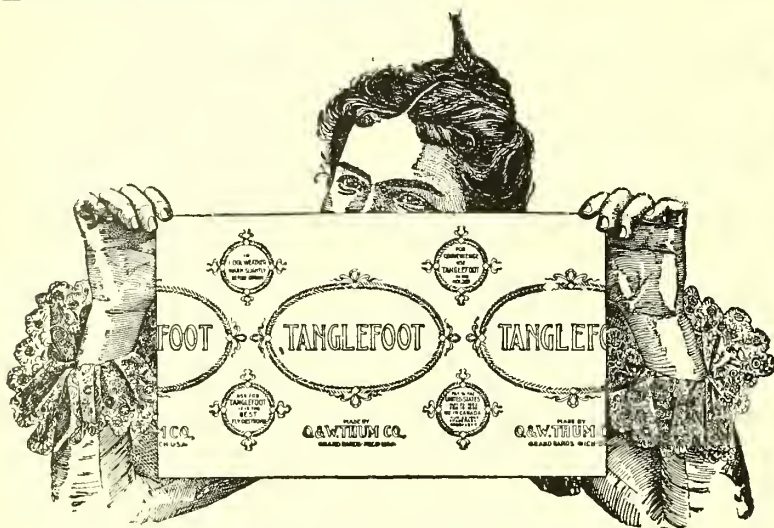
Recommended by Eminent Medical Men. **SKIN** Unscented, yet Sweet as a Rose.

Although low in price, ranks with high-class  
Soaps, and is altogether the best extant for  
producing a Clear and Healthy Skin.

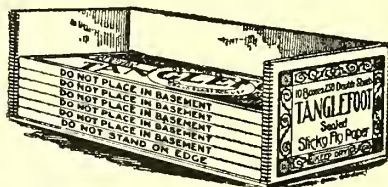
**SOAP.**

The longer it is kept the more it improves and increases in value.  
LIBERAL TERMS TO THE TRADE.

**BRECKNELL TURNER & SONS, LIMITED,**  
16, 17, 18 PETER STREET, SOHO, W.  
ESTABLISHED 1862.

**TRADE ANNOUNCEMENT.**

Send us 5s. We send you in return, free, our parcel-post package of 150 sheets.



A Case of Tanglefoot (500 sheets) costs you 15s. Open it, and place it on the shelf ready for sale, like this. 5 per cent. off on 5-case orders.

2 Sheets of Tanglefoot sell for 1d., and are highly profitable.

Nothing rids a house of Flies so quickly as good Sticky Fly Paper and no Fly Paper is so good as

# "TANGLEFOOT" SEALED STICKY FLY PAPER,

The paper that originated every modern idea and feature of Sticky Fly Paper, and made it profitable and merchantable commodity.

"TANGLEFOOT" is the Paper your Customers prefer, and expect to get, when they ask for Sticky Fly Paper.  
**IT IS NON-POISONOUS.**

OF ALL WHOLESALE HOUSES, OR THE IMPORTERS—

**ALABASTINE CO. (British) LTD., CHURCH ST., SOUTH LAMBETH, LONDON, S.W.**

## NOTE.

OUR Bullet  
**FLY CATCHER,**  
like all Successful  
inventions, provokes the  
snarl of  
JEALOUS RIVALS.

**DO NOT BE  
INTIMIDATED.**

Send for Sample, your  
Orders will follow.



## THE BULLET

(PROTECTED)

1D. **FLY** 1D.  
EACH. EACH.

## CATCHER

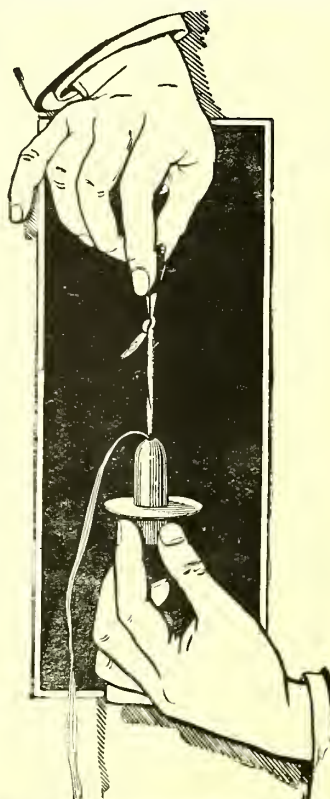
HERMETICALLY SEALED.

**Never Dries Up.**

Packed in  $\frac{1}{2}$ -gross boxes, with Showcards, &c.

PER 6/6 CARRIAGE  
GROSS. PAID

NO INFRINGEMENT ON ANY EXISTING PATENT  
(but an acknowledged improvement).



**GODDON, LTD., 31 Caffyn Street, Blackfriars, LONDON, S.E**



# THE GREAT AND MARVELLOUS INSECT DESTROYER.

Entirely different from any other Beetle or Flea Powder.

"VIKO" will kill Cock-roaches.  
"VIKO" will kill Moths.  
"VIKO" will kill Fleas.  
"VIKO" will kill Bugs.  
"VIKO" will kill Mos-quitos.  
"VIKO" will kill Ants.  
"VIKO" will kill all In-sects.  
"VIKO" will not kill Dogs.  
"VIKO" will not kill Cats.



"VIKO" as a preventive against Moth is unrivalled. It has no equal. If sprinkled amongst Furs and Clothes instantly destroys any existing Insect Life, and ensures perfect freedom from a return of the pest.

Its effect upon Insect Life is simply marvellous.

REGISTERED.

Sold in 3d., 6d., & 1s. Tins.

SOLE PROPRIETORS—

## TUNBRIDGE & WRIGHT, READING.

Manufacturers of the "World-Famed FLY CEMETERY."

TO PREVENT DISAPPOINTMENT, ORDER EARLY.

The World Famous Sticky Fly Paper.

# 'THE FLY CEMETERY'

FREE FROM POISON.

The Original and by far the Best Sticky Fly Paper in the Market.

Annual Sale—MILLIONS.

BEWARE  
OF THE MANY  
SPURIOUS  
IMITATIONS  
IN  
THE MARKET.



STOCK  
A FLY PAPER  
THAT WILL GIVE  
SATISFACTION  
TO YOUR  
CUSTOMERS.

Terms, &c., from

## TUNBRIDGE & WRIGHT, READING.

North of England Depot—4 Gallowgate, Newcastle-on-Tyne.

French Agency—84 Rue St. Martin, Cognac.

**IMPORTANT NOTICE.**—If any of our customers have any over year's stock of our Fly Cemeteries on hand, we shall be pleased to exchange same for fresh goods free of cost.

TELEGRAMS—"FLIES READING."

Telegrams—"KAY STOCKPORT."

# KAY'S "CHESHIRE" BIRDLIME

FOR CATCHING



BIRDS,  
RATS,  
MICE,  
BEETLES,  
FLIES, &c.

In Sealed  
Decorated Tins  
(as illustrated),  
or

In BULK 1, 2, 3, or 7 lb. Tins or Casks.

THE

# "VAMPIRE"

## SPIRAL FLYCATCHER

(GREATLY IMPROVED THIS SEASON).

The Best Flycatcher in the Market.

SEND FOR SAMPLES.

## ALL FLYPAPER MATERIALS.

## Soluble Sanitary Fluid

DISINFECTANT POWDER, &c.

KAY BROTHERS LIMITED, Stockport.

What the Trade thinks about

# 'COBWEBS.'

.....

## Unsolicited Testimonial.

Mr. J. P. FAST, Chemist, Walsall, wrote:

"Sept. 26th, 1898.

Please send one gross 'Cobwebs' per return. P.O. 5/- enclosed. This makes my 20th gross this season. Before selling 'Cobwebs' my annual sale of sticky Fly Papers used to be about two gross."

"COBWEBS," 5/- per gross, carriage paid.

CASH MUST ACCOMPANY ORDER.

SAMPLES FREE.

Millions sold annually.

## CHRISTY STRONG, READING.



# MARSHALLS', 27 RED LION SQUARE, LONDON.

The BUTTERFLY

HUMMING BIRD



Made in beautiful Silks,  
coloured to nature.

SMALL SIZE—

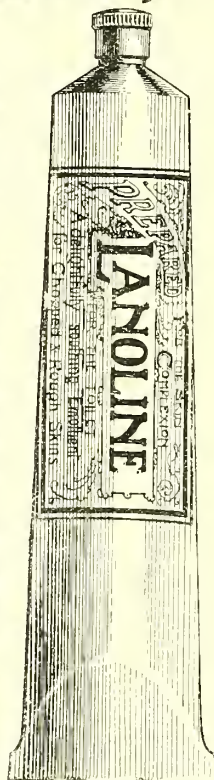
2s. 6d. DOZ. 24s. GROSS.

LARGE SIZE—

3s. 6d. DOZ. 36s. GROSS.

Show Cards with Gross Lots.

WITH WRAPPER LABEL.



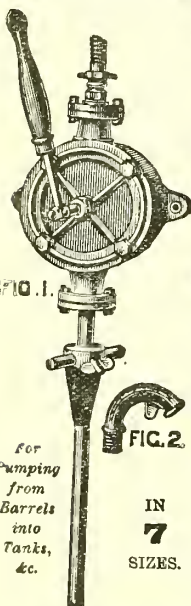
NEW "SPECIAL" SIZES



SACHET.

4s. 6d. PER DOZEN.

30s. & 56s. GROSS.



**BUY THE BEST**  
**OIL**  
**PUMP**  
AND SAVE  
**OIL, TIME, MONEY.**  
**THOUSANDS IN USE.**

This is a representation of our "WILLCOX" NEW SEMI-ROTARY BARREL PUMP, with Improved Taper Barrel Attachment. It is easy to work and simple in construction, and is admitted to be the best article in the market for Pumping Paraffin Oil and all kinds of Liquid from barrels into tanks or other receptacles.

IN 7 SIZES. We hold a Large Stock, and can give Prompt Delivery.

BEWARE OF IMITATIONS. Ours is the Original Patent Pump.

Write for Illustrated List of above, also of our

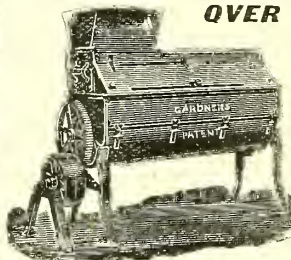
PATENT WIRE-BOUND OIL-RESISTING HOSE.

**W. H. WILLCOX & CO., LTD.**

Offices 23 SOUTHWARK STREET,  
Warehouses—34 and 36 SOUTHWARK STREET,  
**LONDON. S.E.**

Agents for Ireland for our Semi-Rotary Patent Pumps—  
J. JONES & SON, 15 Parliament Street, DUBLIN.

GARDNER'S PATENT  
"RAPID" SIFTERS & MIXERS  
OVER 1,300 working in



Almost Every Trade where  
POWDERS are Sifted and  
Mixed and Lumps Re-  
duced, all being done at  
one operation and without  
loss by dust.

FOR HAND OR POWER.

From 50/- to £90.

CATALOGUES FREE.

WM. GARDNER & SONS, Engineers, GLOUCESTER.

**J. & E. DALTON & CO.**

MANUFACTURERS OF LTD..

**EMERY CLOTHS**

AND **EMERY PAPER,**

Glass Cloth & Glass Papers,

THE DALTON CELEBRATED KNIFE POLISH,

*Maxos Emery, Ground Glass, &c.*

**ALBION MILLS EMERY WORKS**

New Mills, near STOCKPORT.

Agents for Scotland—SHAND BROS., 6 DIXON ST., GLASGOW.



# JEYES' SANITARY COMPOUNDS CO., L<sup>TD</sup>.

~~~~~

THE ONLY ROYAL WARRANT HOLDERS FOR DISINFECTANTS.

Holders of 110 Medals and Awards for Non-poisonous Disinfectants, including Gold and Silver Medals, Paris, 1900.

~~~~~

## **PHARMACY (POISONS) ACT, 1868.**

The Company have to inform their numerous Customers and all Buyers of Disinfectants that owing to the order of H.M. Privy Council, of 31st July, made at a time when it was impossible to appeal to Parliament, and the far-reaching effect of which was, they are authoritatively assured, neither contemplated nor appreciated, the Company's well-known **non-poisonous** "Jeyes' Fluid," will for the present, and until action can be taken to have the said order amended, be labelled "Poison," only because, while **entirely free from Carbolic Acid**, it may possibly contain more than 3 % of its homologues, a word of a very wide range which H.M. Government have altogether omitted to define.

While protesting against the grave injustice inflicted upon them, and although advised that there is considerable doubt as to whether the Order in Council can be enforced against them, the Company have decided that their only dignified course is to avoid any risk of even technically breaking the law, and the possible necessity for long and expensive proceedings to ascertain their legal position.

"Jeyes' Fluid" remains the same safe **non-poisonous** Disinfectant that has held the market for upwards of 20 years, and which has been repeatedly admitted and certified as **non-poisonous** by the highest scientific authorities in Europe, including Sir Robert Rawlinson, C.B., C.E., Dr. W. S. Playfair, Dr. E. Von Esmarch (working in Dr. Koch's Laboratory in Berlin), Sir Charles Cameron, M.D., F.R.C.S.I. (Dublin), Professor William Forster, M.A., F.C.S., F.I.C., &c., Dr. James Eisenberg, M.D. and Phil. D., Professor Froehner (Berlin), P. Caldwell Smith, Esq., M.A., M.D., D.Ph. Cambridge (Glasgow), &c.

**"Jeyes' Fluid"** may be left in the sick room and about the house with a safety which does not apply to a like amount of ordinary alcoholic drinks.

**Send for Jeyes' Pamphlet**, which will be forwarded post free to any person taking an interest in the very important question of hampering the sale of thoroughly efficient and safe disinfectants as distinct from mere **Deodorants**, often bought under a misapprehension.

Chemists holding stocks of "Jeyes' Fluid" should write for a supply of special explanatory "poison" labels which the Company are affixing to all bottles and packages as from this date.

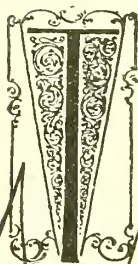
64 CANNON STREET, LONDON, E.C., 1st September, 1900

THE  
DARTRING  
BRAND

appears on all labels  
of the original genuine



<sup>6</sup> LANOLINE <sup>9</sup>



HIS genuine preparation of the purified cholesterol fat of lamb's wool is by far the

BEST  
OINTMENT BASE

IT is miscible with water and aqueous solutions of salts; is readily absorbed by the skin; will not support germ life; is remarkably stable in chemical constitution and does not become rancid.

These are distinguishing features of the original genuine 'Lanoline,' on all labels of which the  
DARTRING BRAND appears.

*In 1 lb. and 7 lb. tins, at 2s. 8d. per lb.*

BURROUGHS WELLCOME & Co., LONDON & SYDNEY



SNOW HILL BUILDINGS  
LONDON. Cable and  
Telegraphic Address:—  
"TABLOID LONDON"

108, PITT STREET,  
SYDNEY N.S.W.  
Cable and Telegraphic  
Address:—  
"TABLOID SYDNEY"

TRADE  
MARK

# 'TABLOID' BRAND PRODUCTS

BURROUGHS WELLCOME AND CO.,  
LONDON and SYDNEY. . . . .

## 'Tabloid' Brand

### Cascara Sagrada

Extract (Dry), gr. 1,  
gr. 2, gr. 3, gr. 4, and  
gr. 5.

This complete range  
of strengths enables  
the chemist to supply  
a reliable prepara-  
tion of true cascara  
accurately dosed to  
suit all demands. No  
drug varies so widely  
in its action and in-  
ferior products cause  
grave dissatisfaction  
and loss of custom.

Bottles of 25 and 100.

*See full price list.*

## 'Tabloid' Brand Blaud Pill.

The great superiority of this product over ordinary iron preparations has often been demonstrated. At the National Hospital for Diseases of the Heart, London, it was found that the administration of 'Tabloid' Brand Blaud Pill caused an increase of 1.2 per cent of Hæmoglobin per diem, whereas in the case of other preparations of iron the increase never exceeded 0.5 per cent, the conditions being exactly similar in all tests.

gr. 4 and gr. 8, in bottles of 100. 8/6 and 12/- per doz. bottles

## 'Tabloid' Brand Soda Mint.

Apart from the fact that this product is most frequently in demand it is the best neutralising compound the chemist can offer his customers. It does not cause nausea as is the case with many inferior preparations.

Bottles of 30 and 100. 4/- and 8/6 per doz. bottles.

## 'Tabloid' Brand Thyroid Gland Substance.

Is the most frequently prescribed Thyroid preparation. It has always produced the most constant and reliable results because it contains the entire substance and all the active principles of the gland. The 'Tabloid' product is also distinguished from other thyroid preparations by its excellent keeping properties.

gr. 1½ and gr. 5 in bottles of 100. 10/- and 24/- per doz. bottles.

The word

'Tabloid'

is a registered trade  
mark or brand which  
designates fine pro-  
ducts prepared by  
Burroughs Wellcome  
and Company.

[COPYRIGHT]

FOR THE  
VOICE.

## 'Tabloid' Brand Potassium Chlorate, Borax and Cocaine Compound.

Has an established reputation amongst singers and speakers for removing hoarseness and clearing the Voice.

In attractive boxes for the counter 5/6 and 10/- per dozen.  
Also in bottles of 30 and 80, 6/- and 12/- per dozen.

# VINOLIA HOUSEHOLD SOAPS.

|                                                                                                             |                 | One<br>Standard<br>quantity | Two or<br>Three<br>Standard<br>quantities | Four<br>Standard<br>quantities | RETAIL<br>AT         | YOUR<br>PR FIT   |
|-------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------|-------------------------------------------|--------------------------------|----------------------|------------------|
| <b>SCENTED.</b> Siamese Twin Bar. Standard quantity, 144 bars<br>Retails 2½d. a bar. Carton of 3 bars, 7½d. | Invoice Price.. | 26 3                        | 25 9                                      | 25 3                           | 30/-<br>2½d.<br>b r. | 20<br>per cent.  |
|                                                                                                             | Net on delivery | 25 6                        | 24 6                                      | 24 6                           |                      |                  |
| <b>UNSCENTED (LARGE).</b> Siamese Twin Bar in carton ...<br>Standard quantity, 112 bars. Retails 3d. a bar. | Invoice Price.. | 24 3                        | 23 9                                      | 23 3                           | 28 -<br>3d. bar.     | 21½<br>per cent. |
|                                                                                                             | Net on delivery | 23/-                        | 22 6                                      | 22/-                           |                      |                  |
| <b>UNSCENTED (SMALL).</b> Siamese Twin Bar in carton ...<br>Standard quantity, 168 bars. Retails 2d. a bar. | Invoice Price.. | 24 6                        | 24/-                                      | 23 6                           | 28/-<br>2d. bar.     | 20½<br>per cent. |
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Carriage Paid on one Standard quantity and upwards. Cases Free.

**VINOLIA CO., LTD., MALDEN CRESCENT, LONDON, N.W.**

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Stirling Chemical Works, Stratford, London, E.

## PHOSPHORIC ACIDS & HYPOPHOSPHITES,

"STERLING BRAND"

CHEMICAL FOOD AND HYPOPHOSPHOROUS ACID,  
Hydrogen Peroxide and Pure Acids, Bismuth, Mercurial and Iron Salts  
Granular and Scale Preparations, Ethers, Essences, Spirits (in Bond).  $\frac{3}{5}$

### PRICE'S GLYCERIN,

also GLYCEROL OF MALT (Price),  
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Glycerol of Malt (Price).

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| " | " | with Hypophosphites. |
| " | " | " Cod Liver Oil.     |
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| " | " | " Easton.            |
| " | " | " Cascara.           |
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| " | " | " creatine.          |
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| " | " | " Linseed, Squill, & |
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\* WRITE FOR SPECIAL TERMS.

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Containing in a perfectly bright and neutral solution the Hypophosphites of Lime, Potash, Iron, Manganese with Quinine, Strychnine, &c.

Superior to similar preparations preserved with glucose or other sugars.

In Bulk (unstamped for dispensing), 1/8 per lb.; W. Quarts 1/6 per lb. In Bottles (stamped) to retail at 2/6 and 4/6 each

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# THE CHEMIST & DRUGGIST SUPPLEMENT.

LONDON 42 CANNON STREET E.C.  
SATURDAY, SEPTEMBER 15, 1900

Businesses for Disposal  
Businesses Wanted  
Premises to Let  
Auction Sales

**ALSO EXCHANGE COLUMN.**  
For Bargains see end of this Supplement.

Partnerships  
Situations Vacant  
Situations Wanted  
Miscellaneous

A Copy of this Supplement is inserted in every number issued of "The Chemist and Druggist."

## CHEMISTS' TRANSFERS.

**MESSRS. ORRIDGE & CO., 56 LUDGATE HILL, E.C.**

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1.—£800.—**LONDON, W. (Busy Thoroughfare).**—Ready-money Retail and Dispensing Business; returns exceed £800 (with appointment attached, giving an income of £100 yearly); profits from business about 40 per cent.; attractive shop, and good stock; commodious residence, held on lease; valuation and premium to be arranged.

2.—£700.—**LONDON, S.E.**—Well-established Business; returns exceed £700; profit £240; very well fitted shop; comfortable residence; private entrance; price £550.

3.—£450.—**LONDON, N. (Main Road).**—Death Vacancy; old-established Business, middle-class; returns about £450, all profitable business; well-fitted attractive shop; convenient house, easy rental; valuation only required, about £300.

4.—£900.—**LONDON, N.W.**—Old-established Retail and Dispensing Business; returns between £800 and £900 per annum; the shop is attractive and is well fitted and stocked; comfortable residence; held on lease; about £750 required.

5.—£800.—**LONDON, S.E. (Good-class Suburb).**—Dispensing and Retail Business; returns £600 (present rate); modern fitted shop and capital working stock; very desirable residence, all in good repair; about the value of stock and fixtures only required.

6.—£500.—**LONDON, W.**—Immediate.—The owner of a Business, returning nearly £500, is desirous of finding an immediate purchaser for the same; having an appointment which takes up most of his time, is unable to give the business his personal attention; about the value of stock and fixtures only required.

7.—£1,300.—**LONDON (First-class Suburb).**—Dispensing and Retail Business; very old established concern; returns about £1,300 per annum; net profit exceeds £450; the shop is commodious, and is handsomely fitted and well stocked; price, valuation of stock and fixtures, and premium to be arranged.

8.—£700.—**KENT (Market Town).**—Capital opportunity for acquiring a good-class Dispensing and Retail Business, situate in the centre of town; returns about £700; the vendor being desirous of effecting an immediate transfer is disposed to close with the first reasonable offer; valuation terms can be arranged.

9.—£500.—**EASTERN COUNTY (Small Town).**—Retail and Dispensing, all good-class business; returns exceed £500; profit £200; very desirable residence, held on lease, at moderate rental; price £450.

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13.—£1,800.—**INLAND WATERING-PLACE.**—First class Dispensing and Retail Business, situate in a charming locality; returns exceed £1,800; net profit £500; very desirable residence, all in good repair; good garden attached; full details will be furnished on application.

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**TERMS FOR VALUATION ON APPLICATION.** **APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.**  
Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

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CONTRACTS FOR DRUGS, CHEMICALS, DRESSINGS, &c.  
THE Board of Management invite Tenders for the supply of Drugs, Chemicals, Dressings, &c., for the three months commencing October 15, 1900.

Forms of Tender may be obtained on application to the Secretary.  
Tenders must be delivered in sealed envelopes, addressed to the undersigned, marked "Tender for Drugs," on or before Saturday, September 29, at noon.

The Board does not bind itself to accept the lowest or any Tender, and reserves to itself the right of accepting the whole or any part of a Tender, or striking out any item.

By order,  
THOMAS RYAN,  
Secretary.

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**EXCELLENT** Shop and Premises, in a thickly-populated working-class neighbourhood in Islington district, as an open Surgery or good Store Chemist; both badly needed; no opposition within half a mile; large plate-glass fronted shop. For appointment to view, apply Mr. Lazarus, 165 Victoria Park Road, South Hackney, N.E.

**SHOPS.**—Commanding premises, with fine elevation, in High Street, Epsom (adjoining railway station); rent to commence £55; good opening for Chemists, Furniture Dealers, Jewellers, Grocers, &c. Owner, 14 Avenue Road, Highgate.



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**VALUATIONS.**—The long and varied experience of F. J. BRETT in valuing all classes of Businesses throughout the United Kingdom, together with his ever-increasing connection, renders it desirable that you should secure his services, in order to have your interests well protected. Stocks carefully taken.

£1,300 returns.—**WORCESTERSHIRE.**—Very old-established Retail; capable of much increase in hands of pushing man; valuation about £1,300, part of which can remain.

£2,000 returns.—**MIDLANDS.**—Very handsomely-fitted Pharmacy; thoroughly good-class Retail; capable of great increase with personal attention; price about £2,000.

£1,500 returns.—**SURREY.**—Exceptionally large and handsomely-fitted shop; the returns can be doubled by suitable man.

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Established 1870.

**VALUATIONS** are in all cases conducted by a member of the firm, and the most careful attention to details, which is so essential, may be relied upon.

1.—**WEST SURREY.**—High-class Dispensing Business; same hands 26 years; selling through serious illness; returns approach £2,000; net profit £600; stock and fixtures, modern and new, worth £1,200; price £1,850; personally inspected.

2.—**HERTFORD.**—Unopposed Light Retail, Dispensing, and Prescribing Business; returns over £1,200 by manager; rent £40, or lease; good house, garden; well-stocked shop; price £600.

3.—**CHESHIRE.**—Light Retail, Dispensing, and Prescribing Business; returns £1,100; same hands 18 years; retiring; good house; excellent position; price £500; stock and fixtures worth £450.

4.—**YORKSHIRE.**—Good-class Light Retail Dispensing and Prescribing Business, returns £1,100 with good profits; low rent; entering medical cause of sale; price £750 or offer.

5.—**WORCESTERSHIRE.**—Light, country Retail Dispensing and Prescribing Business; returns £800, at good profits; well-fitted shop, and well stocked; price £475.

6.—**CORNWALL (Coast).**—Good-class Retail Dispensing and Prescribing Business; returns £900; fine position, best in town; scope for large increase; price £1,350, or offer.

7.—**HOME COUNTY.**—Light Retail and Prescribing Business, making a net profit of £380 yearly, clear of all expenses; good house; low rental; lease granted; owner saved money; price £700.

8.—**SURREY (near Town).**—First class Store Business; returns £40 to £50 weekly; clear net profit over £500 per annum; stock and fixtures worth £1,000; price £1,350; personally inspected.

9.—**SOUTH COAST.**—Good-class Retail and Dispensing Business; returns £1,300, net profit about £400; good house and garden; elegantly fitted; heavily stocked; price £1,200; personally inspected.

10.—**LONDON, N.**—Death vacancy; returns £500 under management, ought to do £1,000; select Retail and Dispensing; price £300.

## UP-TO-DATE CHEMISTS

Should turn to page 36 in this year's CHEMISTS' AND DRUGGISTS' Diary, where we give two reasons why all Chemists should have an annual "STOCKTAKING."

# JUDD & MANNERS

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76 CANNON STREET, LONDON, E.C.

**HOME COUNTY.**—Unopposed Retail and Dispensing within easy reach of London; returns £500 at full prices; small house and good garden full of fruit trees; some hands 10 years; price £350. [2]

**MIDLANDS.**—Handsome shop in good town doing a nice class trade; returns over £1,000, but neglected by owner; valuation only asked. [3]

**ON THE BANKS OF THE RIVER.**—Modern Cash Business with unlimited scope; increasing returns now over £1,100; moderate rent and long lease; complete hold on the district; splendid corner shop near the station; price about £1,000. [4]

**NEAR THE MOUTH OF THE SEVERN.**—Agricultural Business in nice town of 5,000 inhabitants; returns £700; no heavy trade; price £450; large house; rent £45. [8]

# THOS. TOMLINSON & SON

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# J. SHACKLADY,

CHEMISTS' VALUER AND ACCOUNTANT

56 Hanover Street,

LIVERPOOL.

# BUSINESSES FOR DISPOSAL

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

**BIRMINGHAM (Near).**—Light Retail and Prescribing Business, in best position of large and increasing district, with scope for doing a large trade; no opposition; low rent; returns nearly £900; price, valuation of stock and fixtures only. Apply, "Bargain" (25/2), Office of this Paper.

**BRADFORD.**—Main road, best position; plate-glass front, good House and Shop on lease (with Post Office); well adapted for doing a big trade; full particulars, returns, price, &c., on application. Address, 24/17, Office of this Paper.

**CRYSTAL PALACE DISTRICT.**—First-class Cash Retail and Dispensing Business; returns about £2,500, from which a net profit of £550 yearly is derived; cash required, about £1,400, or would accept small premium and valuation of stock and fixtures; principals only; reference desirable. 27/21, Office of this Paper.

**DERBYSHIRE.**—Profitable Light Retail and Prescribing; returns £200 under management, easily increased; large shop and store-room; excellent detached 8-roomed house; garden, poultry runs, &c.; station 10 minutes; rent £20, on lease; on account of ill-health, will sacrifice for £80, or accept reasonable offer. R. M. (182/26), Office of this Paper.

**KENT.**—Twenty miles from London Bridge (population 12,000, and only one other chemist); good-class Retail and Prescribing Business; returns £900, making a net profit of nearly £400 clear of all expenses; rent £40; long lease; good house; price £700; satisfactory reasons for selling; a sound money-making concern. 27/25, Office of this Paper.

**LIVERPOOL.**—For Sale, reasonable price, old-established Business of Chemist and Druggist, situate in a leading thoroughfare, and close to one of the largest hospitals; excellent Dispensing connection, which, in the hands of a competent man, could be largely increased; reason for disposal ill-health. Apply, J. W. Simpson & Munro, Solicitors, 15 Lord Street, Liverpool.



**LONDON, S.E.**—Seven miles from London Bridge, in healthy suburb a genuine good-paying Business in full swing; in a thickly-populated district of the working-class; main road, best position; nice house, large garden, side entrance; returns over £800; Cash trade; plenty of Prescribing and Dispensing; same hands 11 years; for sale by private treaty; investigation invited; price £750. Apply, by letter in first place, to A. N., 113 Blackheath Road, S.E.

**LONDON, N.W.** (High-class Suburb).—A thoroughly reliable Retail and Dispensing Business doing over 2,000 new Prescriptions yearly; returns £1,200; net profit £400; commodious house attached; price £900; genuine reasons for selling. 27/29, Office of this Paper.

**MANCHESTER (Suburbs).**—High-class rapidly growing neighbourhood; small Family and Dispensing Business, established 14 years; £350. 22/27, Office of this Paper.

**NEAR MANCHESTER.**—Business, established over 50 years, for Sale, owing to ill-health; splendid opportunity; best position in town, window in each of the two principal streets; returns about £10 weekly, can easily be increased; profitable; 5 years' lease; rent £45; terms, valuation; introduction given; Apprentice knows business; inspection invited. 23/1, Office of this Paper.

**SHEFFIELD.**—Profitable Light Retail Business, with Photographic side-line, returning £600; well situated; plenty of scope for increase; shop well stocked; good house, rent moderate; splendid opening for Dentistry; for quick sale will accept £350, or near offer. 21/16, Office of this Paper.

**SOUTH-WEST OF ENGLAND (Market Town).**—Gentleman wishing to retire, will negotiate for successor for good Retail and Agricultural Business, which has been neglected; good 9-roomed house and garden, and capital business premises; returns £550, yielding £200 clear; price £450, of which £100 can remain at 5 per cent. Address, "Pickwick" (27/38), Office of this Paper.

**A REGISTERED** Chemist or Limited Co., with £150 cash, could hear of a very good thing by applying to "Alphas," Grenville Park Road, Leytonstone, E.

**CLOSE** on £800 returns.—Lancashire Manufacturing District; Mixed Business; rapidly-increasing Photographic side-line; rent made by Extractor; rent £28; main street; 12 years' lease; price £650; established over 50 years. "Excel" (19/35), Office of this Paper.

**FOR Sale,** Chemist's Dispensing and Retail Business, in good-class locality, South Side, Edinburgh; immediate disposal, a present proprietor is in failing health; reasonable terms; splendid opening for energetic young man. Address, P46, Keith & Co., Edinburgh.

**NEGLECTED** Branch under management; S.E.; Post Office more than pays rent; suit beginner and wife; good house; densely populated; no opposition. 19/21, Office of this Paper.

**RETURNS** average £1,500; capable of great increase; splendid position; large market town; Agricultural, Dispensing, Prescribing, and General Retail, with small Wholesale; price only £750; very great bargain; large house and business premises; rent £90, let-off £20. Apply, "Veritas," c/o Messrs. Oldfield, Pattinson & Co., Todd Street, Manchester.

**THOROUGHLY** good Dispensing and Family Retail; returns £1,250; profits £500; lease 20 years; good position in main road of splendid neighbourhood (S.W.); no agents. Apply by letter, X. Y. Z. Willows & Francis, 40 Aldersgate Street, E.C.

**20 MILES** from London; genuine Light Retail with small amount Dispensing and Wines, very few Patents; Post-office attached; business established 33 years; present hands 23 years; net profit about £220; owner going into other trade; price £500, or reasonable offer for quick sale accepted. 24/32, Office of this Paper.

**£650.**—London, N.: Light Retail; main road; lock-up; well stocked; about 17 years' lease; £45 rent; good reasons for disposal; exceptional value, £300. "Chemist," 372 Harrow Road, W.

**£250.**—For immediate Disposal, Retail Business; corner shop in densely-populated district; increasing photo trade; returns £350; under unqualified management; could easily be doubled by qualified man; post-office attached pays rent; roomy house. Apply, 299 North Road, Preston, Lancs.

**£800** to immediate purchaser.—Stock, fixtures, goodwill, and utensils-in-trade of a going concern; 30 years under present proprietor, who is retiring; extensive premises, fronting three roads, with gateway; house, seven rooms; shop, double front; hall entrance, sitting-room, kitchen, three large cellars and warehouses; suitable for large trade. Apply, Owen, M.P.S., Soho Road, Handsworth, Birmingham. No Agents.

**£2,500** probable value.—High-class Cash Business, in splendid position in West of England town; large house and first-rate business premises; lease granted at moderate rent or premises old also; returns £3,500, yielding nearly £700 a year clear profit; unobscured scope in most side-lanes; plenty of Dispensing. Apply to the sole agents, Judd & Manners, 76 Cannon Street, E.C.

**£800** will purchase a Chemist's Business and Fittings in the heart of Birmingham; a really good opening. Apply, S. S. 28/16, Office of this Paper.

## PARTNERSHIPS.

**PARTNERSHIP** wanted in an established business, Wholesale preferred, by Chemist with capital; references given and required. Address, "Neon" (22/9), Office of this Paper.

## BUSINESSES WANTED.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond.

**MIDLANDS.**—Advertiser wants, immediately, an unopposed Business yielding £200 per annum net profit; in populous industrial neighbourhood; half purchase-money down, and remainder as may be arranged; strict investigation required. "Lancastrian" (22/34), Office of this Paper.

**ADVERTISER** (single) wishes to purchase Business with plenty of scope; price £450 to £600; suburbs or provinces; neglected business for choice; house and garden preferred; will pay a bonus for any information if acted upon. "X Rays" (28/4), Office of this Paper.

**A GENUINE** small Business, in the suburbs of London, not more than 30 miles from City; a neglected one preferred; nobody with business in agents' hands need apply; purchaser would undertake a management, with the option of purchase, if satisfactory; good bonus paid for information for opening, if acted upon. "Ready-money" (27/28), Office of this Paper.

**WANTED,** a small Business with room to increase; Eastern counties preferred but not essential; Advertiser would go as Assistant or Manager with a view to purchase. F., 3 Old Market Place, Sudbury, Suffolk.

## FOR SALE.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond

**MUST** be sold immediately, the complete Stock and Fixtures (the latter solid mahogany, best make, and good as new) of handsome Pharmacy; recess labelled bottles, show-jars, window-carboys, upright, bent, and revolving plate-glass cases, and large mirrors; complete and large stock of Drugs, Proprietarys, Perfumes, and Photographic requisites. "Solio," 26 Freemantle Road, Forest Gate, London.

## APPRENTICESHIPS.

**T. MARSHALL & SON,** Chemists, Beverley, Yorks, have a vacancy for a respectable, well-educated youth as Apprentice; comfortable home; terms on application.

**WANTED,** gentlemanly youth as Apprentice, or Turnover-Apprentice, in a good Dispensing business; comfortable home, and every facility for acquiring a good knowledge of the business. Apply, H. H., 175 West End Lane, W. Hampstead, London, N.W.

## SITUATIONS OPEN.

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Advertisers whose Announcements appear under this heading can make arrangements to see applicants for the situations at our Offices, by giving a few days' notice to  
**THE PUBLISHER, 42 Cannon Street, E.C.**

### RETAIL.

**BATH (Near).**—Junior Assistant, aged about 20, for good-class business; must be well recommended, and of gentlemanly address. State age, height, references, salary required, and enclose carte (to be returned), to E. J. King, Pharmaceutical Chemist, Midsomer Norton, near Bath.

**BATH.**—Junior or Improver (about 20), immediately; indoors; 2 kept. Apply, with photo, stating age, height, experience, and salary required, to W. Bright & Son, 26 Southgate Street, Bath.

**BIRKENHEAD.**—Wanted, Junior Assistant or Turnover Apprentice, for Light business; indoors; comfortable home. Apply, T. Fore, Chemist, Cleveland Street, Birkenhead.

**BIRMINGHAM.**—Wanted, Junior or Improver for good-class Mixed business; good references required; one indoors and possessing knowledge of Post Office work preferred; also vacancy for an Apprentice. Fred. Barlow, M.P.S., Balsall Heath, Birmingham.

**BLACKPOOL.**—Junior, at once, for one month (holiday vacancy, but possible permanency); 26s.; afternoon weekly, no Sunday duty. Also Apprentice wanted. Carey Taylor, South Shore, Blackpool.

**BOURNEMOUTH.**—Assistant (indoors), accurate and neat Dispenser, capable of taking charge during temporary absence of principal, in good-class Dispensing Store business; home comforts. Apply, 23/24, Office of this Paper.

**BRIGHTON WEST.**—Smart Junior, with knowledge of Photography and Dispensing; afternoon and evening off weekly; hours 8 to 8; alternate Sundays. Usual particulars and salary required to Fitzherbert Jones, 181 Church Road, West Brighton.



## SITUATIONS OPEN—cont.

## RETAIL—continued.

**BRISTOL.**—Wanted, a Junior Assistant (indoors) in a good-class Dispensing business. Apply, stating age, height, reference, salary required, and if possible enclose photo (which will be returned), to W. Pitchford, 54 Cotham Hill, Cotham, Bristol.

**BRISTOL.**—Competent Assistant required; outdoors; not under 24; must be steady and businesslike; moderate hours, and no Sunday duty. State height, salary, and references, enclosing photo (to be returned), E. Presley, 12 St. Augustine's Parade, Bristol.

**BURSLEM.**—Assistant wanted, for Country Wholesale and Retail; of good experience, and a smart and efficient man at the counter; outdoors: a permanency to a good man. Please state age, height, salary required, married or single, 198 Waterloo Road, Burslem.

**BURY ST. EDMUNDS.**—Wanted, Junior Assistant, for Front Counter; hours 8 to 8; early closing on Thursday 2 P.M., no Sunday or night duty. Apply, with copy of references, stating age, height, salary required (outdoors), and when at liberty, Floyd & Co. (Limited); Bury St. Edmunds.

**CARDIFF.**—Wanted, competent Assistant, about 24; neat and accurate Dispenser. Please state age, height, references, and salary required (outdoors), photo, Duck & Son, Chemists, Cardiff.

**CEYLON.**—Qualified Assistant wanted, aged about 25; references must be unexceptionable; 4 years' agreement; salary £100 per annum, everything found; advance of £10 each year; second-class passage paid out. Apply by letter, Baiss Brothers & Stevenson, 4 Jewry Street, E.C.

**CORNWALL.**—Wanted, an Assistant, for Mixed Country business. Apply, stating age, qualification, and salary required, with reference, to Oliver Vincent, Chemist, Truro.

**DEVONPORT.**—Wanted, immediately, Assistant for Branch (slightly Mixed); live in house. Apply, with photo, stating age, references, salary required, &c., to Perkins, 15 Cumberland Street, Devonport.

**DONCASTER.**—Early in October, an indoor Assistant (qualified preferred), about 22 to 24, for a good-class General Family business. Apply, with full particulars of age, height, previous experience, &c., to M. H. Stiles, Pharmaceutical Chemist, Doncaster.

**EASTBOURNE.**—Dispenser required, for Eastbourne; must be quick, accurate, careful, and experienced; good references indispensable. Apply, personally, to G. O. Dunsart, Sussex Drug Company (Limited), Graville House, Arundel Street, Strand, at 11 A.M. on Saturday, the 15th, or by letter, with full particulars and photo, if possible, to 135 Queen's Road, Brighton.

**EASTRY (Kent).**—Junior or Improver in Mixed Country business; time for recreation and study. State age, references, and salary required, enclosing carte, if possible, A. E. Woodruff, Eastry, S.O., Kent.

**ELY.**—Junior Assistant (outdoors) for Mixed Country business. Apply, stating usual particulars and salary required, to Howard, Chemist, Ely.

**FOREST GATE.**—Improver or Junior; outdoors; 2 kept; Light Dispensing and Retail with Photographic. Apply, personally, or send full particulars as to age, height, experience, and salary required (enclosing photo), to Harold Mitchell & Co., 56 Woodgrange Road, Forest Gate.

**FOR LONDON.**—Qualified English Assistant; outdoors; light hours; preference given to one who can Dispense German and other Foreign Prescriptions. Application, in first instance by letter, "Pharmacist," c/o Messrs. Haddon & Co., Advertising Agents, Bouverie House, Salisbury Square, London, E.C.

**GAINSBOROUGH.**—Junior Assistant wanted for Light Retail and Photographic business, with Doctor's Dispensing; hours 8 to 8, Saturday 10; half-day off weekly. Apply, with usual particulars, to White, Chemist, Gainsborough.

**GLOUCESTER.**—Wanted, Junior Assistant (outdoors) for Light Retail and Dispensing business; state age, height, salary, with photo (to be returned), and reference. Apply, Ward, Chemist, Gloucester.

**HADFIELD.**—Assistant wanted, aged about 21, for Mixed Retail business. Send usual particulars of experience, age, salary (indoors), and photo (to be returned), Richardson, Chemist, Hadfield, near Manchester.

**HORSHAM.**—Wanted, immediately, a qualified, gentlemanly Assistant, aged about 25, accustomed to good-class Dispensing and Retail; 2 kept; indoors; comfortable home; permanency; easy hours; weekly half-holiday. Apply, stating age, height, salary required, experience, &c., enclosing photo (to be returned), to Smith & Gallier, Horsham, Sussex.

**LINCOLN.**—Wanted, Junior Assistant (outdoors), to take charge of Branch shop. Apply, sending photo, with usual particulars, stating age and salary required, Martin (Limited), Chemists, Lincoln.

**LIVERPOOL.**—Outdoors; qualified; suit middle-aged man seeking permanency. Give references, state age and salary required, Caley, 453 Stanley Road, Liverpool.

**LANDUDNO.**—Wanted, a qualified Assistant; a liberal salary given to a good Counterman. Apply, J. Burton, Chemist, Llandudno.

**LONDON, W.**—Wanted, at once, Junior Assistant; indoors; not necessarily qualified if thoroughly competent; salary £45. Usual particulars to Jackson & Co., Acton, W.

**LONDON, N.**—Part-time Assistant (indoors), towards end of September; one accustomed to a good-class Light Retail and Dispensing business; evening work principally, giving plenty of time for Reading or attending Lectures during the day; comfortable home. State age, references, and enclose photo (returnable), to Anderson, Chemist, Crouch End.

**LONDON, S.E.**—Qualified Assistant, for Branch; indoors: no Sunday duty; close Thursdays at 5. Apply, W. H. Hooper, Chemist, 12 Dartmouth Road, Forest Hill, S.E.

**LONDON, S.W.**—Wanted, a competent Junior Assistant. Apply, stating usual particulars, with photo if convenient, to Foster & Dallas, 1 Lavender Hill, S.W.

**LONDON, W.**—Qualified Assistant; indoors. Apply, personally if possible, or by letter, enclosing photo, to Obas. W. Brumwell, Pharmaceutical Chemist, 118 Holland Park Avenue, W.

**LONDON, W.**—Wanted, shortly, an Assistant, about 24, for good-class business; well up in Dispensing and neat writer. Apply, with full particulars, to C. Davies, 194 Holland Park Avenue, London.

**LONDON, W.**—Assistant wanted for front counter; must be smart salesman and obliging; qualification not essential. Apply to H. J. Bound (Limited), 88 Westbourne Grove, W.

**LONDON, S.E.**—Wanted, a Junior Assistant, with knowledge of Dispensing. W. Ralph, Pharmaceutical Chemist, 19 Burnt Ash Hill, Lee, S.E.

**LONDON, W.**—Required, a qualified man as Senior (indoors), in the West-end. Send, with full particulars, age, salary, with photo, to H. E. R., 18 Trigon Road, Clapham, S.W.

**LONDON, S.W.**—Competent Assistant; outdoors; well up in Dispensing; about 23 years of age; accustomed to good class of trade. Apply to H. T. Escritt, 102 High Road, Streatham, S.W.

**LONDON, N.W.**—Junior Assistant for Light Retail and Dispensing business. Full particulars, W. F. Cox, 116 Craven Park Road, Harlesden, N.W.

**MARGATE.**—Junior Assistant in old-established business, Dispensing and ordinary Retail. State age, experience, height, and salary (in or out doors), with photo, to Wootton & Son, Chemists, Margate.

**MORETONHAMPSTEAD.**—Junior (indoors), for good-class business in small market town (holiday and health resort); easy hours; half-day weekly. Apply, stating usual particulars and when disengaged, to C. E. Evans, Moretonhampstead, Devon.

**N.W.**—Junior Assistant wanted; indoors. Apply, personally, or if by letter send full particulars, to Williams & Peters, 165 Fortess Road, Kentish Town, London.

**NOTTINGHAM.**—Wanted, Junior or Improver Assistant at once; one used to good Mixed business. Apply with full particulars as to age, height, salary required, &c., Thos. Wilson, Lenton, Nottingham.

**OXFORD.**—Assistant, qualified, about 28 to 30; outdoors; good Country business; very moderate hours; 2 o'clock Tuesdays. Full particulars, with photo (to be returned), &c., T. Houghton & Son, Oxford.

**RYDE, I.W.**—An Assistant (indoors), accustomed to good-class Retail and Dispensing. State age, height, and salary, to Tenison Smith, Ryde, I.W.

**SUTTON.**—Junior or Improver wanted for Light Retail and Dispensing business; moderate hours; 2 kept. State age, height, experience, salary required indoors, and enclose photo to be returned. Francis T. Sanders, Chemist, Sutton, Surrey.

**TENBURY.**—Reliable and trustworthy Assistant wanted (outdoors); half-holiday and Sunday off; permanency. State salary, age, reference, &c., J. Slade.

**TORQUAY.**—Wanted, a qualified Assistant (indoors) for a high-class Dispensing and Retail business; Junior kept. Full particulars to H. F. Bourne (late Guyer & Shapley), 11 Strand, Torquay.

**TRURO.**—Wanted, qualified Assistant (outdoors), for good-class business. Please state age, height, salary required, and references, with photo (if convenient), to W. H. Bücher, Pharmaceutical Chemist, Truro.

**WINDSOR.**—Junior or Improver, aged 18 to 20, wanted, about October 1, for Retail and Dispensing business where a Senior is also kept. State age, height, references, and salary required (indoors), enclosing photo, to R. W. Houfe, Pharmaceutical Chemist, Windsor.

**A JUNIOR** or Improver, in Hampshire: one just out of time preferred; good opportunity for gaining Dispensing experience and Retail; easy hours; time allowed for study; no Sunday duty. Apply, 182/10, Office of this Paper.

**AN Assistant** wanted, immediately. Apply, giving particulars as to salary required, height, and reference (enclosing carte), to Edwin R. Biggleston, Chemist, Canterbury.

**ASSISTANT** for quick trade; must be obliging and pushing; used to Store trade preferred; qualified. Full particulars as to age, references, salary, &c., to "Statim" (182/43), Office of this Paper.



**COMPETENT** Assistant, with qualification, required as soon as possible; good opening; weekly holiday. Reply, stating whether married, and particulars as to references, experience, salary required, &c., to "Papaver" (27/8), Office of this Paper.

**DEIGHTON & SMITH**, Pharmaceutical Chemists, Bridgnorth, have a vacancy for a Dispenser; also a Junior Assistant or Improver; indoors. State salary required and usual particulars.

**GIBSON DIXON**, Chemist, Halifax, has a vacancy for a Second Junior Assistant; a young man just out of Apprenticeship, anxious for improvement in good-class business, worked on Store principles; outdoors; weekly half-holiday; state age, reference, and salary required; send photo if possible.

**HEPPELL & CO.**, Foreign Chemists, 35 Haymarket, S.W., require the services of a Junior accustomed to good-class Retail and Dispensing; outdoors.

**MANAGER**; qualified; must be energetic. State age, height, salary required, and enclose photo, to Wand, Haymarket, Leicester.

**MESSRS. TIMOTHY WHITE COMPANY**, Chemists, Portsmouth, have two or three vacancies for trustworthy Assistants, with early prospect of management, in various parts of the South of England and Isle of Wight; some Juniors also required.

**THOROUGHLY** capable qualified Assistant required; one accustomed to Store business; good salary and liberal commission given; total abstainer preferred. Apply, F., 77 Summerfield Crescent, Birmingham.

**TWO** smart qualified Assistants wanted, about 30 and 40; must be good Prescribers; hours 8.30 to 10 P.M., Thursdays 2, Sundays 6 till 9 P.M. Apply, personally, at Worhoys & Son, M.P.S., 76 New Out, S.E.

**WANTED**, immediately, an Assistant, able to manage Branch, newly opened; able to speak French preferred; abstainer; must have good references. Apply, with full particulars, enclosing photo, to J. L. Hopkins, Chemist, Pontcymmer.

**WANTED**, an Assistant; unqualified by examination preferred; must be a good Dispenser and accustomed to a Country business, and be well recommended; preference given to one likely to remain some few years; salary (indoors) £50, with a rise of £5 per annum up to £70. Apply, in first place, to O. B. A., c/o Messrs. Maw, Son & Thompson, Aldersgate Street, London, E.C.

**WANTED**, by October 1, Manager for Branch Light Retail and Dispensing; qualified; married preferred; to live on premises. Apply, with full particulars, to Gregory & Wrenn (Lim.), East Street, Taunton.

**WANTED**, a good Counterman, for Light Retail and Prescribing, capable of pushing up a neglected business. Apply personally, if possible, to Lakeman & Co., Church Place, Leytonstone.

**WANTED**, an Assistant, for a small Mixed Country business (branch) in a Colliery district in Durham. Apply, stating salary, age, experience, reference, married or single, &c., to "Obemist," c/o Messrs. Ismay & Son, Wholesale Druggists, Newcastle-on-Tyne.

**WANTED**, quick, reliable Dispenser for Medical man; male or female; qualified or unqualified; part-time man preferred; state age, references, and salary required (outdoors). Apply, Dr. Cooke, St Helens.

**WANTED**, two competent Dispensers, one qualified and one unqualified. Apply, Lewis & Burrows (Limited), 22 Great Portland Street, W.

**WANTED**, steady obliging Assistant, qualified, to take sole charge of business; none but those having business capacity need apply; age not to exceed 26; liberal terms offered. Apply, 27/18, Office of this Paper.

### WHOLESALE.

**DRY Counter**.—Wanted, by a London Wholesale Drug House, an energetic, accurate and capable man for the Dry Counter; must be accustomed to the work. Give full particulars by letter to 180/40, Office of this Paper.

**LADY** Chemist, with good experience, wanted for a Wholesale and Manufacturing House; Major qualification preferred. Address, with full particulars, to "Chemist," c/o Mather & Crowther (Lim.), 10 to 12 New Bridge Street, E.C.

**PERFUMERY**, Toilet Articles, &c.—Wanted, competent man, capable of Manufacturing same, and taking full charge of working staff. State age, experience, and salary required. "Perfume" (180/12), Office of this Paper.

**PILL Department**.—Wanted, a Youth with experience in Pill-making. Apply, General Apothecaries' Company, 49 Berners Street, London, W.

**PILL-ROOM**.—Wanted, a young man, used to Making and Rounding Pills by steam machinery. Apply, Willows, Francis, Butler & Thompson, 40 Aldersgate Street, E.C.

**REQUIRED** in London, good all-round man accustomed to pack Drug Hampers and assist generally; experience and first-class references absolutely necessary; hours, 9 to 6.15; good prospects. Replies received in confidence, and must state age, experience, if engaged, wages required, "Juice" (181/56), Office of this Paper.

**SMART** Canvasser required, to call upon London Chemists; must be of good address and have experience. Apply by letter, to "Alpha" (182/30), Office of this Paper, giving full particulars as to salary required.

**TO** French-speaking Pharmacists.—A vacancy will shortly occur on the Travelling Continental staff of a London manufacturing firm, for a capable man, of sound experience and judgment; must be a good linguist, and know continental methods and ways. State experience, salary, age. Apply, 177/23, Office of this Journal.

**WANTED**, a practical Chemist to take charge of Wholesale Laboratory; must have good practical knowledge of Pharmaceutical preparations. State experience, age, and salary expected to 21/9, Office of this Paper.

**WANTED**, in London, working Manager; Packed Proprietary Sundries and Disinfectants; must be a thoroughly practical live worker able to introduce, make, and turn out Novelties to catch the market. State age, references, terms, and state if qualified, "Manufacturer" (19/24), Office of this Paper.

**WANTED**, well-educated Youth (about 16) for Manufacturing Chemists' City office; good opening for suitable lad. Apply, stating particulars, to A. M. (21/7), Office of this Paper.

**WANTED** an Assistant to take the management of a Sundries department in Wholesale Druggist's Sundries business. Apply, stating previous experience and salary required to "Sundries," c/o Cowie & Co., Gresham Street, E.C.

**WANTED**, a qualified Assistant, to work in a Manufacturing Laboratory. Apply, giving the usual particulars, and stating expected salary, to "Verity" (25/32), Office of this Paper.

**WHOLESALE** Druggists require Junior Invoice-Clerk, with knowledge of Drugs and Patents; quick calculator essential, also good writer. Apply, giving references as to character and experience, also state age and salary required, 181/72, Office of this Paper.

**WORKS-MANAGER** wanted; must be thoroughly experienced in the manufacture and putting on to the market of Household Articles such as baking-powder, sauces, oils, polishing-pastes, blacking, boot-creams, &c., &c. Apply, stating experience and salary required, to 181/71, Office of this Paper.

## BOARD AND RESIDENCE.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond

**TO STUDENTS**.—Comfortable lodgings, situate between Muter's and Willis'; Minor or Medical; terms very reasonable. Call or write to 15 Metbley Street, Kennington Park, London, S.E.

## SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 6 words beyond.

### RETAIL.

**PART-TIME**; qualified. T. L., 49 Dover Street, Piccadilly, W.

**QUALIFIED**; 30; London or suburbs; outdoors. 23/35, Office of this Paper.

**PART-TIME**, Dispensing, in West-end, wanted. S., 119 Mount Street, W.

**JUNIOR**; 19; good references; London. J. R., 39 Hetherington Road, Clapham, S.W.

**JUNIOR**; London. State hours and full particulars, W. S., 10 Bridge Street, Newark.

**MINOR** Student; part-time; London or suburbs. Webster, 2 Bickley Road, Leyton.

**JUNIOR** or Surgeon's Dispenser; London; 22; tall. E., 94 Queen's Road, Bayswater.

**LOCUM**; 35; experienced; references. Geo. Reed, Mr. Irwin Page, Chemist, Boston.

**PART-TIME** wanted; 22; qualified. "Student," 3 The Broadway, Herne Hill, S.E.

**QUALIFIED**; 25; high-class Retail and Dispensing. Gorst, 17 Grove Street, Rochdale.

**QUALIFIED**; 23; good experience; London preferred. 24/37, Office of this Paper.

**QUALIFIED**; 24; disengaged; West London preferred. F. Pettifer, Leighton Buzzard.



SITUATIONS WANTED—*cont.*

## RETAIL—continued.

- ASSISTANT**; qualified; good references. J. M., 16 Haggard Road, Twickenham, S.W.
- ASSISTANT** or Manager; outdoors; London. T., 35 Alexandra Road, St. John's Wood.
- ASSISTANT**; 21; tall; good Dispenser; time for study. Hannan, Market Hall, Dumfries.
- DISPENSER**; outdoors; disengaged September 27. M., 36 The Broadway, Ealing, W.
- ASSISTANT**; 23; good experience, references; City district. Bach, 173 Ladbroke Grove, W.
- LOCUM**; disengaged; qualified; experienced Prescriber. "Chemist," 32 Laurel Grove, Penge.
- PART-TIME**; Doctor or Chemist; good experience. "Chemicus," 34 Eaitb Grove, Chelsea.
- JUNIOR** (20) desires engagement; 5½ years' experience. H. B., Bick House, Dalton-in-Furness.
- DISENGAGED**; aged 29; height 6 ft.; good references. Michell, 85 Victoria Dock Road.
- STORE-TRADE**.—Counter-hand; 25; 5 ft. 10 in.; London only. 27/6, Office of this Paper.
- JUNIOR**; 7 years' experience; large town preferred. Fowle, Brauchley House, Long Sutton, Lincs.
- LOCUM**; disengaged to-day; best experience. "Chemist," 19 Limerston Street, Fulham, S.W.
- LOCUM**; disengaged September 14; qualified. J. R., 166 North End Road, West Kensington, W.
- ASSISTANT-Warehouseman** or Senior Counterman; disengaged. "Ren," 42 Bronsart Road, Fulham.
- ASSISTANT**, Manager, or Locum; 28; disengaged. "Statin" (26/7), Office of this Paper.
- MANAGER** or Locum (qualified), in a Light business; middle-aged. 27/26, Office of this Paper.
- LOCUM, M.P.S.**; town or country; disengaged 24th. William Smith, 12 Westfield Road, Surbiton.
- EVENING** employment; at liberty from 5; qualified. Webb, 56 Ashmore Road, Harrow Road, W.
- ASSISTANT**; 12 years' good experience; outdoors; disengaged. S., 56 William Street, Herne Bay.
- QUALIFIED**; open for evening work (one or more); aged 22. "Quercus," 56 Trinity Square.
- JUNIOR**; 20; 4½ years' experience; indoors; good references. H. O.S., 12 York Road, Southend-on-Sea.
- QUALIFIED**; 27; varied experience; disengaged 15th. "Druggist," 56 Redman's Road, Stepney, E.
- PART-TIME** or Surgeon's Dispenser; Junior; Manchester or district. Apply, 25/30, Office of this Paper.
- LOCUM-TENENS**; disengaged September 23; good references. Thorne, 7 High Street, Sydenham.
- DISPENSER** to Surgeon; London; experienced. S. Holliday, 38 Lower Church Street, Warwick.
- MANAGER** or Senior; energetic; up-to-date experience; qualified; 32. 19/18, Office of this Paper.
- LOCUM**; disengaged September 26; highest references. Fenwick, 69 Bridge Street, Workop, Notts.
- EVENINGS**; 20 hours weekly; French and Italian; stock or counter. Thomas (26/2), Office of this Paper.
- ASSISTANT**; unqualified; 25; good experience; London preferred. Ingle, 29 King Street, Twickenham.
- ASSISTANT**; Dispensing, Photography; 5½ years' experience, principally Stores. 69 Anlaby Road, Hull.
- QUALIFIED**; Senior or Manager; outdoors; experienced; 32; disengaged. 28/11, Office of this Paper.
- DISENGAGED**; aged 33; qualified; as Manager or Locum-tenens. "Alpha," 78 Union Street, Ryde, I.W.
- DISPENSER** (Lady); qualified; outdoors; bookkeeping; disengaged. G., 19 Glyn Mansions, Addison Bridge.
- MANAGER** or Branch; 30; qualified; good references; married. "Aurant," (27/30), Office of this Paper.
- MANAGER**; good Prescriber and Dispenser; married; 35. "Kodak" (182/14), Office of this Paper.
- MANAGERSHIP** in pushing Cash trade; 23; good business experience. "Ph.C." (27/5), Office of this Paper.
- ASSISTANT**; 27; unqualified; good experience; Photography; outdoors preferred. 27/32, Office of this Paper.
- OUTDOORS**; 27; experienced; disengaged; Doctor or Chemist. Barnes, 126 London Road, Kingston-on-Thames.
- JUNIOR**, where Senior is kept; aged 22; over 4½ years' experience. "Radix," c/o Douthwaite, Chemist Liss, Hants.
- SENIOR** or Manager; qualified; aged 28; 10 years' experience; good Dispenser. H. A., 51 High Street, East Grinstead.
- MANAGING** Assistant or Locum; high-class; 28; disengaged October. Duff, Westholme, Cliftonville, Margate.
- LOCUM**, Dispenser and Bookkeeper to Surgeon; 30 years' varied experience. "Celeriter," 3 Silver Street, Worcester.
- ASSISTANT** (22), London experience, desires situation in London; outdoors preferred. Asher, Scott's Bank, Elgin, N.B.
- PART-TIME** engagement (3 or 4 evenings); London experience; Photography; 22; 6 ft. 22/32, Office of this Paper.
- COMPETENT** Assistant; 24; London preferred; good Dispensing experience. Fortnam, 35 Bath Street, Leamington.
- QUALIFIED** Assistant requires some hours' engagement up to 6 o'clock, near City. Apply, 25/35, Office of this Paper.
- PERMANENCY** required by experienced Manager; first-class references. "Kodak," 15 St. Margaret's Street, Canterbury.
- DISPENSER** (Lady), qualified, used to charge of Surgery, desires daily post. M., 113 Loughborough Park, Brixton, S.W.
- ASSISTANT**; 25; unqualified; good class experience and references; abstainer; time for classes. 21/11, Office of this Paper.
- ASSISTANT**; 24; unqualified; 8 years' experience; good references; London preferred. D. Lewis, 22 Marlboro' Street, Cork.
- AS** Manager; London and Colonial experience; abstainer; qualified; aged 29; permanency. "Etam" (25/27), Office of this Paper.
- QUALIFIED**; 22½; 7 years' experience; disengaged September 24; London, West end, preferred. J. C. H., 9 Goldhawk Road, W.
- MANCHESTER DISTRICT**.—Qualified; aged 28; excellent references. J. R., Norcliffe Farm, Styal, Handforth, Cheshire.
- DISPENSER** or Branch Manager; qualified; energetic; London Stores; successful Prescriber; 31. 25/21, Office of this Paper.
- MANAGER**; competent and reliable; good references; aged 37. "Velox," Colman, Goodman & Co., 125 Aldersgate Street, E.C.
- BRANCH** Manager or otherwise; permanency; married; reference good; country preferred. "Apenta" (25/20), Office of this Paper.
- QUALIFIED**; 22; 6 ft.; West-end preferred; 5 years' provincial and town experience. Griffiths, 1 Kensington Terrace, Haverfordwest.
- QUALIFIED**; 22; outdoors (£2 5s.), indoors; splendid references; 7 years' experience; disengaged. Parker, Smithford Street, Coventry.
- MANAGER**; 25; married; permanency only; disengaged September 25; good references. Gregory, 91 Hampstead Road, London.
- MANAGER**; qualified; 27; first-class West-end and provincial experience; disengaged October. Pattinson, 1 Station Bridge, Harrogate.
- JUNIOR**; 22; 5 years; height 5 ft. 10½ in.; engagement for morning and evening; neighbourhood of Strand preferred. 23/5, Office of this Paper.
- SENIOR** or Manager; qualified; young, active; disengaged October; excellent experience and references. "Phenacetin," 84 Flora Street, Cardiff.
- ENGAGEMENT** as Senior; outdoors preferred; London and provincial experience; disengaged. G., 4 Portland Place, Clifton, Bristol.
- ASSISTANT**; 26; unqualified; good-class Retail and Dispensing; outdoors; country; good references. "Dispenser," 405 East India Road, Poplar, E.
- MANAGER**; qualified; married; good experience good-class Retail and Dispensing; permanency; excellent references. H., 47 East Street, Faversham.
- DISENGAGED**.—As qualified Assistant, Manager, or Locum-tenens; aged 33; height 5 ft. 6 in.; varied experience. "Alpha," 78 Union Street, Ryde, I.W.



**SOUTH OF FRANCE.**—Major (23) seeks engagement for coming season: good references; wide experience; height 5 ft. 10 in. 22/2, Office of this Paper.

**DISPENSER** (lady); qualified; experienced in Hospital and private work; bookkeeping, typewriting; good testimonials. Boys, 82 Station Road, Epsom.

**TO** Manage small Branch in the country: good all-round man; low salary, have small income; married; aged 37 years. L., 10 Chippenham Road, London, W.

**EXPERIENCED** Counterman, Prescriber, and Stockhand; disengaged 25th; abstainer; 40; single; unqualified. "Locum," Pharmacy, Crayford, Kent.

**MANAGER** or Senior (outdoors); qualified; 32; married: first-class experience in Dispensing (West-end), Prescribing, and Extracting. 22/14, Office of this Paper.

**ASSISTANT**, unqualified, for Dispensing: 4 years' experience; disengaged about middle of October; good references. A. B., Mr. Sinclair, Chemist, Ellesmere.

**EXPERIENCED**, competent, reliable; aged 31; 5 ft. 10 in.; seeks permanency, Wholesale or Retail; married; disengaged. "Veritas," 139 Church Road, Caustonbury, N.

**TEMPORARY** or Permanent; disengaged; experienced Manager; Registered Chemist and Dentist; Prescribing business preferred; single. W., 45 New Road, Chatham.

**ASSISTANT** or Manager; good Prescriber and Dispenser; tall; competent; good experience; permanency; married. Address, "Bromide," 57 Gordon Road, Nottingham.

**BRANCH** Manager; permanency, or work business for sale: 15 years' good London and provincial experience; married; aged 30; highest references. "Shutter" (24/25), Office of this Paper.

**LOCUM.**—Retired Pharmaceutical Chemist, booking short engagements, disengaged September 20; abstainer; Prescriber, Photography; references. "Chemist," 45 New Walk, Leicester.

**ASSISTANT** (unqualified), as Counterman; good Store experience; height 5 ft. 10 in.; aged 26 years; willing and obliging; good references. Apply, "Sanatas" (27/7), Office of this Paper.

**THE** Chemists' Assistants' Union has facilities for securing good and lucrative engagements for all its members; annual subscription, 5s. Apply to Mr. C. E. Pickering, 97 High Street, Marylebone, W.

**PERMANENCY** required by Branch Manager; qualified; married; aged 36; excellent references from present employer and others. "Manager," c/o Brighthouse, Chemist, Suffolk Street, Newland, Hull.

**RELIABLE** qualified Chemist (married), with extensive first class experience, including up-to-date trading, seeks a position as Manager; disengaged shortly. W. B., 153 Murdoch Road, Handsworth.

**MANAGER** (qualified), Extractor; aged 38; married (no children); long London and Edinburgh experience; excellent testimonial. Apply, E. J. M., c/o Messrs. Ismay & Sons, Chemists, Newcastle-on-Tyne.

**A** YOUNG gentleman, son of clergyman, and M.A., Cantab, is ready to take an Assistant's position in town or country; quiet place preferred; good references from last employer. G. B., 37 Leybourne Road, Leytonstone.

**ENERGETIC** young fellow (19) requires Evening employment, where a good knowledge of Chemistry may be put to a remunerative use; excellent testimonials. E. P., 46 Manchester Street, Gray's Inn Road, London, W.O.

**QUALIFIED**: Englishman; aged 45; height 5 ft. 10 in.; unmarried; good London and country experience; salary moderate; disengaged September 20; permanency desired. Address, "Chemist," 192 Cowbridge Road, Cardiff.

**THE CHEMISTS' ASSISTANTS' UNION** is prepared to supply good, reliable, and thoroughly experienced Managers and Assistants on the shortest notice. Apply, stating requirements, to Mr. C. E. Pickering, 97 High Street, Marylebone, W. Patrons' subscriptions 10s. 6d. per annum.

## WHOLESALE.

**SURGICAL** Instruments, Sundries, or any good permanency; thorough varied experience. 22/35, Office of this Paper.

**TRAVELLER**, 10 years' experience, wishes to represent first-class Drug or Druggery house. X. (25/19), Office of this Paper.

**GENTLEMAN**, 27 (English, German, French), seeks permanent situation in first-class Wholesale firm; would travel. 21/8, Office of this Paper.

**GENTLEMAN** requires position of trust; varied experience; accustomed to control of hands; qualified. "Energetic" (27/23), Office of this Paper.

**CHEMIST**, aged 30, energetic and fond of business, desires responsible position in Wholesale, where opportunities for advancement would occur. W. (26/6), Office of this Paper.

**SURGICAL**—Wanted, post by expert Appliance Fitter; can fit Rupture against any man in the business; London preferred. "Unique" (23/32), Office of this Paper.

**YOUNG** man (22), first class Retail, Dispensing, and Photographic experiences, desires situation in Wholesale; excellent references. H. A., 3 Knebworth Road, Stoke Newington, London.

**CHEMIST** wishes to strongly recommend Assistant, who desires situation in Wholesale or Packing Department, large retail; very reliable. "Stockkeeper," 126 Upper Lewes Road, Brighton.

**TRAVELLER**, having a large and safe connection with the leading Chemists, Druggists, &c., over Ireland, is open to accept an additional agency for a first-class house or manufacturer; highest references. Reply, J. A. (181/55), Office of this Paper.

**SOLUBLE ESSENCES**, &c.—An experienced and qualified Chemist, who has for many years manufactured these for the leading firms for Home and Export trade, will soon be open for engagement; moderate salary. Apply, "F.O.S." (22/39), Office of this Paper.

## MISCELLANEOUS.

*Special charges are made for Advertisements under this heading, which can be obtained on application.*

**WE** are willing to Advertise in that List of yours provided you quote us a reasonable rate. Daisy Ltd., Mammoth Works, Leeds.

**GLASS FUNNELS AND JARS.**—About 1,000 10-inch funnels, and 500 3 quart glass jars for disposal, very cheap. Apply, personally, or write, R. J. Fullwood & Bland, 31 Beviden Street, London, N.

**A BARGAIN.**—The entire second-hand Fittings for a Shop 14 by 12 ft., including gold-labelled Drawers, Lockers, Shelving, 2 Counters, Dispensing-screen, Desk with Showcase in front, Window-enclosure, Carboys and Stands, carriage paid, for £40. Full particulars from R. Tomlinson & Sons, Medical Fitters, Bond Street, Birmingham.

**SULPHUR-TABLETS** and Sulphur and Sarsaparilla Tablets, in 7-lb. hinged and labelled boxes; 2 cwt. 35s. cwt., carriage paid; 1 cwt. 34s., ½ cwt. 18s., 28 lbs. 10s., carriage forward, prices and show-cards free; Sticky Fly-papers, your own name, 5s. gross, 5-gross lots carriage paid; Disinfecting Shells, 4s. 3d. gross, 5-gross lots £1. Christy & Co. (late White), Chemist, Leicester.

**WINES FOR CHEMISTS.**—Orange, the best, 3s. per gall. in jars, 2s. 9d. per gall. in small casks; Sherry, 4s. 6d. and 6s. 6d. per gall. in jars, 3d. per gall. less in small casks; Quinine Wine, B.P., in bottles (6 to the gallon), 7s. 9d. per doz., cases free, no labels 7s. 6d. per doz. Send for our Price Lists (Wholesale and Retail), Terms, and Samples. We pay for your Licence. Manufacturers to the Trade of Medicated Wines for 20 years. The Royal Standard Wine Company, Oxford Mansions, New Oxford Street, London, W.O.

**CHEMISTS' Fittings.**—High-class Fittings at Low Prices.—14-ft. Chemist side fitting, fitted 70 mahogany-fronted drawers, bevelled glass labels, cut-glass knobs, lockers, shelves, cornice, &c., complete £15 10s.; mahogany-top serving counter, plate-glass front, 10 ft. 6 in. long, £9 5s. bent plate-glass counter-case, 5 ft. long, 80s. Cheap house for window enclosures, alterations, wall-cases, glass facias, and stall plates. Chemists fitted complete. Estimates free. Mills, Shop-fitter, Shop-front Builder, Steam Works, 163-165 Old Street, London, E.C. (late 203 City Road).

**CHEMISTS' Shop-fittings.**—Ranges mahogany drawers, with bevelled-edge glass labels and cut-glass knobs, shelving above, lockers below; mahogany dispensing-screens; counters with glass-case fronts; wall-cases; bent-front and flat-top counter-cases; counter-desks; tooth-brush cases; complete shop-rounds, &c.; every requisite for Chemists, new and second-hand; extensive stock to select from, at extremely low prices; practical men sent to all parts; estimates free. Matthews, Chemists' Fitter, 14 and 16 Manchester Street, Liverpool; Works: 9 Preston Street. Telephone 6695. Illustrated Catalogue on application.

**SHOPFITTINGS AND SHOWCASES.**—Complete wall drug-fitting, with solid mahogany-fronted drawers, each having bevelled-edge glass label and cut-glass knob, under-part being bottle-lockering, and above mahogany-edged shelving with pilasters, bevelled-edge plate-glass mirror poison-cupboard surmounted by bold mahogany cornice, £16 10s.; 12-ft. mahogany and plate-glass serving-counter, £10; 14-ft. ditto, £12; 8-ft. ditto, £7; handsome dispensing-screen, counter and sponge-case, new design, solid mahogany and plate glass, £16 10s.; bent plate-glass counter-cases, from 2 ft. 6 in. to 8 ft. long; all in stock and ready for immediate despatch. Philip Josephs & Son, 54 and 93 Old Street, London, E.C.

## CUCUMBER AND GLYCERINE.

**ROUSE'S** Cucumber Paste is the best for preparing Cucumber Emulsion. Formulae and labels free with each jar; ½ lb. (for 3 lbs. emulsion), 2s. 3d.; 1 lb., 4s. 3d.; 7 lbs., 25s., post free. Rouse, 61 Charlotte Street, London, W.

N.B.—Cucumbers actually enter into the composition of this article.

## ADVERTISE IN EAST AFRICA.

**MANUFACTURERS** of Proprietary Medicines, Perfumery, Soaps, &c., wishing to increase their business, should advertise in British East Africa by means of handbills and showcards. For further particulars write, Manager, Eastern Advertising Agency, Mombasa, British East Africa. One of the best fields; large demand for patent medicines.



# Exchange Column—Bargains.

$\frac{1}{2}$ d. per word with name and address. 1d. per word if we register the address and attach a number.

No Advertisement inserted for less than 6d.

Remittances payable to EDWARD HALSE, and crossed MARTIN'S BANK, LIMITED.

## FOR DISPOSAL.

### APPARATUS.

5-light "Thorscar" acetylene-generator, cost £8 8s., as new; price £5; deposit. ELLIOTT, Ashley Road, Southampton.

What offers for 4-gal. percolator, Y. G. Co.'s graduated (without tap)? or will accept check-till. ALBERT POMFRET, Brookhouse, Blackburn.

Bargain.—Model vertical engine, tubular boiler, glass gauge, whistle, double-action slide, valve cylinder, bronzed stand, exhibition model, silver-plated, high speed, perfect; worth 42s., accept 12s. 6d., free; photo 1d. "MANAGER," Marshgate Obemical-works, Stratford.

### BOOKS AND PERIODICALS.

Squire's "Companion," 15th edit., 4s. 6d., post free. HINKLEY, Victoria Road, Seacombe, Liverpool.

"Family Physician," new, 5 vols., 25s.; Cripps's "Pharmacy," 3s. 9d. FENTON, Harpurhey, Manchester.

What offers? Darwin's "Elementary Botany"; Ince's "Latin Grammar"; Atfield's "Chemistry"; British Pharmacopoeia, 1898; Muter's "Analytical Chemistry." MCINTYRE, High Street, Ellesmere.

### DRUGS AND CHEMICALS.

Two 1-lb. Dike's scale pepsin. (Steara); what offers? WATSON, Chemist, West Ham.

100 lbs. choice Kent hops, 10d. per lb., delivered free, any quantity. GRIFFITH, Shepton Mallet.

### FORMULÆ.

Always reliable; Brooks's Practical Recipes.—Following recommended for autumn and winter requirements: "Glycerine Cream," indispensable toilet requisite; "Blood Cleanser," equals any sold; "Chilblain Cure," cleanly and safe; "Influenza Mixture," first dose cures; "Linsced and Licorice Balm," rapid cough-cure; "White Oils," creamy, inseparable, stimulating embrocation; "Tic Specific," acts like magic; "Corn Paint," beats all advertised; "Quinine and Iron Tonic," pleasant, bright, and permanent; "Instant Cure for Toothache," rarely fails; "Occasional Pills" for Ladies, safe, honestly recommended; "Harmless Headache Powders," one sells hundreds; "Ringworm Specific," cures worst cases; recipes 1s. 1d. each. 3 for 2s. 6d., post free, full instructions; printed list of 480 recipes free on application. TOM BROOKS, Obemist, Hornsey, London, N.

### OPTICAL AND PHOTOGRAPHIC.

2-guinea folding pocket Kodak, nearly new, with case, shoulder-strap, and clamp for affixing to cycle; what offers? HAWORTH, 84 Lister Lane, Halifax.

Camera, Lizar's half-plate, combination stand, 2 D.D. slides, R.R. lens, turntable, Thornton-Pickard shutter; only few times used; cost, with extra slide, £5 17s. 6d.; sell £4 10s. GARR, Tarbert, Argyllshire.

### PROPRIETARY ARTICLES.

Offers—10-lb. tin Parke-Davis's pure unclosed insect-powder. Elm Grove Pharmacy, Southsea.

Holloway's beef-and-coca wines, 9s. and 16s. 6d. dozen. FENTON, Harpurhey, Manchester.

What offers? 4 doz. Wilson's food, 1s. 6d. size; 1 doz. Salvia eucalyptus powder; all clean. 22/4, Office of this Paper.

1s. Munyon's; 4 cough, 4 cold, 6 dyspepsia, 4 headache, 5 kidney, 3 nerve, 4 rheumatism; 17s. 6d. delivered. WYATT, Chemist, Lancaster.

14 bottles Corbyn's lily of the valley, white rose, opoponax, and Peau d'Espagne, in original 20-oz. bottles; what offers? 27/24, Office of this Paper.

71 6d. Zomela soap; 60 6d. Zomela soap; 27 1s. 1½d. Zomela ointment; 36 1s. 1½d. Zomela cream; 22 1s. Chiusol powder; what offers? BRIDGE, Bournemouth.

Two 1s. 1½d. Moonseed pills, 1s.; 2 2s. 9d. Liebig's chemical food, 3s. 6d.; 1 Allen's Zylbalsamum, 1s. 6d.; 6 Rackham's liver-pills, 3s.; 7 Rackham's tonic compound, 3s. 6d.; 8 doz. 1s. Ovaline soap, 5s. per doz.; all clean; post free. GRIFFITH, Shepton Mallet.

## SHARES.

Ten Camwal shares, ordinary; best offer. 21/15, Office of this Paper.

Two Camwal ordinary shares; what offers? SALTER, 70 St. Mary Street, Weymouth.

31 Camwal ordinary, 23s. 6d.; 13½ preference, 24s. 6d. A., 12 Eltham Road, Lee, S.E.

## SHOP FITTINGS.

Scales, brass pillar, mahogany box, drawer, good condition, 15s. HUMBLE, Chemist, Brentford.

Carboy, glass, cut stopper, 7 gals., mahogany stand, Maw's fig. 1; 10s. cash, carriage forward. BOOR, Wisbech.

Showcase, Maw's best, fig. 7, 5 ft.; 2 plate-glass show-stands, Maw's, fig. 2; perfect condition; offers. JONES, Obemist, Loughborough.

## MISCELLANEOUS.

Water-bed, solid I.R., Woolley's fig. 1, £6 6s.; used only few times; unsoiled, and perfect; what offers? ASHFIELD, Obemist, Rhyl.

12 doz. Holloway's wines, most kinds, half face-value; 123 1s. Munyon's remedies, in case; 2 cwt. Welsh honey, 5d. per lb.; about 1 cwt. each pulv. carui, caryoph., pimento and fenugreek, cheap. Samples from JONES, Obemist, Newcastle Emllyn.

Offers wanted for 34 1s. 9d. and 6 2s. 9d. indigestion-mixture; 11 1s. 1½d., 12 7½d. Swan mixture; 33 6d. essence of carrots (maker, Burrows, Gainsboro'); 6 2s. 6d. Strouber epilepsy-cure; 33 6d. box's Ivory soap; all saleable condition; 6th edition Martindale's "Extra"; 15th edition Squire's "Companion." DENNIS, Chemist, Northampton.

## WANTED.

Three 8-gal. carboys. WATSON, Chemist, West Ham

Chemist's sign-mortar. Terms, "RAD" (12/19), Office of this Paper.

Good microscope for analytical work. "ALPHA," 82 Brooke Green, W.

Small outside dental showcase. Particulars, 25/34, Office of this Paper.

Camwal ordinary shares. State lowest price, 21/27, Office of this Paper.

Dispensing-scales, few bottles, small nest drawers, cheap. 8 Byron Road, Birmingham.

Wire-blinds, lengths 31, 40, 31 inches, or larger size to cut up. EVANS, Chemist, Camberley.

Old electric lamps and scrap platinum. P. ROWSELL, 9 Derwent Grove, East Dulwich, London.

Surgeon's ordinary square outside-lamp; size of iron bracket, 13½ in. 23/26, Office of this Paper.

Tablet-machine, "Keystone" preferred. State lowest price to C. COLE, 4 Bank Buildings, Boscombe.

"C. & D." Diary, 1888. 2s. 6d. each given for first two copies received, by S. B., Office of this Paper.

Lowson's "Botany." Please state lowest price, S. A. SHEARD, c/o Chantry, Chemist, Totland Bay, I.W.

Mortar and pestle, large sizes; also upright case, 2 ft. 6 in. in length; cheap. DUCK & SON, Chemists, Cardiff.

"Selecta Prescripta" and "Aid to Dispensing"; latest editions. BARKER, 26 Warner Street, Loughborough.

Shop-rounds, gold-labelled, good condition; and 2 swan-necked carboys, 2 gallons. Lowest price, DAVID GEORGE, Pentre, Glamorgan.

B-P., 1898; Lowson's "Botany"; Newth's "Inorganic Chemistry"; Peikin and Kipping's "Organic Chemistry"; latest editions and lowest prices. EVANS, 27 Parke Road, East Twickenham.





**A Weekly Journal of Pharmacy and the Drug-trade.**

ESTABLISHED 1859.

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London, E.C.

**Telegraphic Address:**  
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**"THE CHEMISTS' AND DRUGGISTS' DIARY" FOR 1901**

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**Summary.**

MAKERS of proprietary articles held a congress in Paris last week (p. 453).

BE sure to glance through the letters to the Editor. They are rather interesting (p. 482).

FURTHER particulars in regard to carbolic-acid scheduling are given on p. 456 and p. 473.

MORE names of persons who have obtained wine or spirit licences are printed on p. 456.

THE COURSE OF THE JAPANESE IODINE-MARKET is reviewed by our Yokohama correspondent on p. 486.

THE BRITISH PHARMACOPEIA has been gazetted as the standard in five South African territories (p. 461).

THE YOUNG MAN who canoed from Dover to Calais on Sunday is a student of the Paris School of Pharmacy (p. 458).

THE GERMAN APOTHEKER VEREIN has met and confirmed the resolution of last year as to free trade in pharmacies (p. 462).

SENNA has been re-investigated by Tschirch and Hiepe. We give a concise account of the results they have arrived at (p. 472).

AT THE CINCHONA-AUCTIONS on Tuesday there was an advance of fully 15 per cent. compared with the last London auctions (p. 486).

FERRI SULPHAS EXSICCATUS is rather an uncertain chemical. Messrs. Cowley and Catford explain why, and how, it should be made (p. 475).

EFFEL TOWER LEMONADE as a title does not satisfy Philadelphia law, and the manufacturers have introduced "artificial" into the title (p. 462).

DR. THORPE's report on the work done in the Government laboratories during the past year yields a number of points which interest our readers (p. 471).

THE ROOT of *Monsonia ovata* is being successfully used in treating dysentery amongst our troops in South Africa. A figure and particulars of it are given on p. 461.

REFLECTIONS on the British Association presidential address and observations on Scotch affairs and the camphorated-oil appeal are "Xrayser's" topics this week (p. 469).

GREGORY'S POWDER absorbs water and carbonic-acid gas when exposed to the atmosphere. Mr. T. F. Harvey in a paper on p. 475 gives the data of experiments on the point.

A CHEMIST AND DRUGGIST who has been serving as a compounder with General Rundle's force, and has been invalided home, records some of his experiences on p. 491.

THE MARKETS are fairly brisk this week. Quinine is advancing in second-hands, opium is slow of sale, chamomiles are again dearer, and so are elaterium and thymol (p. 486).

THE BRITISH ASSOCIATION, which is to meet in Glasgow next year (September 11), completed its scientific business on Wednesday. We print abstracts of some of the papers (p. 466).

THE BRITISH CHAMBERS OF COMMERCE meeting in Paris was exceptionally successful. Our correspondent there gives some interesting facts concerning it, and French amenity to the British (p. 458).

IN a Gregory's powder case heard at Watford the solicitor for the defence successfully used Dr. Attfield's Plymouth speech regarding the B.P. not being the standard under the Sale of Food and Drugs Act (p. 478).

WE report a curious vinegar case under the Sale of Food and Drugs Act in which the whole three samples had been analysed with similar results, and the case was withdrawn because the certificates could not be reconciled (p. 478).

TWO petitions have been lodged for winding up the Ulster Chemists (Limited), one compulsory, the other voluntary (p. 480). It was mentioned when one petition was lodged that it was desired to prevent the sale of the individual businesses to the original vendors on unsatisfactory terms (p. 479).

THE PHARMACEUTICAL COUNCIL OF IRELAND at last week's meeting received the approval of the Privy Council to the regulation making 21 years the age of entry for the Druggists' examination. Mr. Turkington failed to convince the Council of the desirability of stating on the Druggists' certificates that they are empowered to mix poisons. The Council instructed letters to be sent to M.P.'s who had helped with the Companies Bill, and the President regretted that the English (G.B.) Council should act independently in legislating on the companies-question (p. 463).

## English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

### Brevities.

The Photographic Salon will be opened at the Dudley Gallery, Egyptian Hall, Piccadilly, W., on the afternoon of Wednesday, September 19.

George Turner, a salesman in the employ of Messrs. Hodder & Co., chemists, Bristol, has been ordered to pay 40s. costs for embezzling a sum of money from his employers.

We have not yet heard the last of St. Helens chlorate explosion. It was stated at the Town Council meeting last week that proceedings in regard to the damages will be taken at the next assize.

Whitchurch tradesmen had a carnival last week on behalf of a cottage hospital. Mr. Rowland, chemist and druggist, who was attired in a Welsh costume, got the second prize for collecting. His box contained 4*l.* 19*s.* 4*d.*

Chemists' apprentices should keep an eye on County Council scholarships. Mr. Thomas Sykes Ferrior, apprentice with Mr. F. Bates, chemist and druggist, Slaithwaite, has just taken one for two years at the Huddersfield Technical School.

Charles Meadley (16) was fined 10*s.* and 2*s.* costs at Westminster Police Court on August 7, for throwing a bottle of liquid ammonia into a shop. The bottle broke, and the fumes almost suffocated the shopkeeper and several customers.

A Leicester woman bought two penny packets of white precipitate from Mr. R. H. Hutton, chemist and druggist of that town, explaining that it was for her children's heads. She committed suicide with it last week, and Mr. Hutton was a witness at the inquest.

The Cash Supply Stores (Limited), of Halifax (amongst other things "chemists and druggists" by company-qualification) have offered ten seats to be placed in the town on condition that their name is allowed on the seats. The Corporation is thinking it over.

Mrs. Crappmann, the wife of a London stockbroker, besides drinking a bottle of champagne and a bottle of brandy, "as well as other spirits," every day, was in the habit of taking 1-oz. doses of chlorodyne. She died, but alcoholic poisoning was the cause of death according to the coroner's jury.

It was stated at a laudanum-poisoning inquest at Cartmel last week that the poison had been in the house twenty years. The Coroner was sceptical about a bottle of such peculiar shape, colour, and labelled "Poison," being in the room so long and not noticed until found in deceased's hand.

The Stockport Town Council has appointed, at a salary of 70*l.* a year, a lady inspector, whose duty will be to visit houses in which births are registered, and advise mothers in a homely and practical manner on the rearing and feeding of children. She is also to keep her eye open as to the sanitation of the dwellings, assist in cases of illness, and so on, disinfection being a speciality with her. She will have a lively time.

### Chemists' Licences.

Mr. George Turner, chemist and druggist, Biggleswade, has been granted an off spirit-licence.

The following is an additional list of the names of retailers to whom off wine-licences have been granted:—

Mr. Thomas Hulme, pharmaceutical chemist, Bury.

Mr. Charles Holmes, chemist and druggist, Market Place, Market Weighton.

Mr. J. J. Clayton, chemist and druggist, Ellesmere.

Timothy White Company (Limited), Chapel Street, Petersfield.

Mr. Frederick John Ryall, chemist, of 42 Portland Road, Devonport.

Mr. J. Murison, managing-director Parkes' Drug-stores, 31 High Street, Chelmsford.

### The Grocers' P.A.T.A.

This affair died last week. Wednesday, August 29, is the exact date. Mr. W. S. Glyn-Jones, the secretary, wrote about it to the last issue of the *Grocer*. The reason is that the Grocers' Federation, at a meeting in Bristol, passed a resolution requesting the General Purposes Committee to ask prominent manufacturers to co-operate with them in providing means whereby an assured minimum profit might be secured to retailers. In face of this resolution, and in order that there should be no clashing, the Grocery Section of the P.A.T.A. retires.

### A Mercurial Draught.

A carman named Lacey appeared at Camberwell Police Station, on September 11, and intimated that he had swallowed "a pound of quicksilver." He was promptly given an emetic of hot water and mustard and kept on the move pending the arrival of a doctor. After receiving medical attention, he stated that he bought the quicksilver from a man for 6*d.* A small bottle labelled "Mercury" was found at the house at which he lived.

### Glamorganshire Drugs.

Mr. Seyler's report of analyses during the last quarter deals with 246 samples. All he says about drugs is that of the 3 samples of milk of sulphur 2 were genuine and 1 contained 59 per cent. of sulphate of lime. Of the camphorated oils 3 were genuine and of good quality, and the fourth was suspicious as to the purity of the oil employed. Of the 3 samples of spirit of nitre, 1 was slightly under strength, and the sample of aromatic spirit of ammonia was also somewhat under the standard. Of 2 samples of the seidlitz powders the tartaric acid in one sample was 10 per cent. deficient in weight.

### Committee on Food-preservatives.

Dr. Timbrell Bulstrode, one of the members of this Committee, and Mr. Charles J. Huddart, the Secretary, have, during the past month, visited Amsterdam, Hamburg, and various places in Denmark, for the purposes of studying the dairying industry and the methods of transport of dairy-produce, with special reference to the milk and butter supplies, and the butter export-trade, in relation to the use or non-use of chemical preservatives. The Committee is proceeding to Ireland this week with a similar object.

### Carbolic Poisonings.

At Macclesfield on September 10, an inquest was held on the body of Mrs. Annie Whittaker, who sent her daughter, aged 9, for a pennyworth of carbolic acid, which was supplied by Mr. William Challinor, chemist, who neglected to put upon the bottle a "Poison" label. The woman drank the whole of the acid, and died in half an hour. The jury returned a verdict of suicide whilst insane, and censured Challinor for his carelessness.

At an inquest held at Twickenham on the body of a barman named Knight, who had poisoned himself with carbolic acid, Mr. H. F. Peake, chemist and druggist, Hampton Road, deposed that deceased purchased 4 oz. of carbolic acid at his shop, stating that it was for disinfecting-purposes. The Coroner (Dr. Gordon Hogg) said that the coroners of the country had brought pressure upon the Home Secretary, and now carbolic acid, by which so many suicides took place, was scheduled as a poison, and none but chemists were allowed to sell it. It was not compulsory that persons should sign the poisons-book for carbolic acid, but he should advise that this be done, as it might have a good effect.

### Fires.

Messrs. Parke's Drug-stores, Richmond, were on Wednesday morning badly damaged by a fire, which destroyed Lipton's grocery-store, and the boot and shoe warehouses of Lilley & Skinner (Limited).

In an alarming outbreak of fire which occurred in Aldgate Avenue, E., on September 7, the premises, amongst others, of Messrs. Kux & Co., capsule-manufacturers, and Mr. R. Cohen, chemical-thermometer manufacturer, were considerably damaged.



An outbreak of fire took place on September 8 in the works of Messrs. J. B. Light & Co., oil-refiners, of Rumford Street and Henry Street, Liverpool. The brigade at once turned out with the chemical-engine and other appliances, and the fire was subdued in about a quarter of an hour after their arrival. Meanwhile a considerable amount of damage was done.

On September 10 an outbreak of fire occurred on the premises of Boots (Limited), chemists, St. James's Street, Derby. An errand-boy was engaged in filling a cistern with methylated spirit from a cask in the cellar when he lit a match and held it above the cistern. An explosion was the immediate result, and upwards of 15 gals. of the spirit was destroyed. A shop-assistant, hearing the report, at once went to the boy's aid, and managed to subdue the flames with some canvas. The lad escaped without serious injury, but his hair and eyebrows were very much singed.

#### Tenders for the Supply of Drugs.

Only three firms tendered for the supply of drugs, &c., to the various establishments of the Holborn Union. These were considered at a meeting of the Guardians on Wednesday, September 12. Messrs. Burgoyne, Burbidges & Co., of Coleman Street, E.C., offered to supply at 25 per cent. off the prices set forth in the Guardians' schedule; Messrs. Manners & Hopkinson, Southwark Bridge Road, S.E., offered 40 per cent. off; and Messrs. Corbyn, Stacey & Co., the present contractors, offered 35 per cent. off. Mr. George Eade (Chairman of the Dispensary Committee) being away holiday-making, Mr. Gibson moved that the tenders be adjourned for the consideration of the committee. The Chairman: How have Messrs. Corbyn, Stacey & Co. served us during the past year? The Clerk: Very well; no complaints at all. Mr. Bolton (Vice-Chairman): I shall move that Messrs. Corbyn, Stacey & Co., have the tender. Mr. Gibson withdrew his proposal to defer the matter, and the Guardians then unanimously agreed upon the tender of Messrs. Corbyn, Stacey & Co.

#### Mineral Waters for the Workhouses.

At the same meeting of the Holborn Board, Camwal (Limited) tendered for mineral waters, and as their prices were considered reasonable, the tender was accepted. The following were the prices: Soda-water in syphons, 1s. 5d. per dozen; in large, screw-stoppered bottles, 10d. per dozen; small ditto, 8d. per dozen. Lemonade in syphons, 2s. 3d. per dozen; ditto in large, screw-stoppered bottles, 10d. per dozen; and in small bottles, 8d. per dozen. Lithia-water in syphons, 2s. 3d. per dozen; and ginger-beer in large, screw-stoppered bottles, 10d. per dozen.

## Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

#### Pharmaceutical Examinations.

All applications for the undermentioned examinations must be lodged (along with the other necessary papers) with the Registrar by 11 A.M. on the following dates:—For Preliminary examination, on Tuesday, September 18; for Pharmaceutical Assistants' examination, on Monday, September 24; for Registered Druggists' examination, on Tuesday, September 25; for Pharmaceutical Licence examination, on Wednesday, September 26.

#### A Parsimonious Board of Guardians.

To the last meeting of the Castlereagh Guardians, Dr. McDermott (of Ballaghaderin) transmitted an amended requisition for medicines. He stated that to meet the wishes of the Guardians he had curtailed the quantity and value of the articles by more than one-half, and he (Dr. McDermott), did not see how he could go further with the "cutting-down" process, if the medical and surgical needs of his populous district were to be attended to. The Clerk said the doctor's requisition was before the Guardians on two occasions previously. The Guardians considered the amount

too large (60*l.*), and now it had been reduced to 30*l.* 2*s.* 10*d.* The Chairman said that was reasonable enough. The doctor should not be confined to a few articles. After some discussion the requisition in the amended form was adopted.

#### A Different Class of Board.

Newcastle West (co. Limerick) are a different sort of Board from Castlereagh. They complain that the list of the L.G.B. is not comprehensive enough, and especially so in the case of surgical instruments. The Board passed a resolution at their last meeting that the revision of the list should not be left to the L.G.B., but that the Union doctors might be consulted; further that the Guardians considered it their duty to see that the hospital and dispensaries were properly equipped, as the want of a particular medicine or instrument might lead to loss of life.

#### Not up to the Mark.

At the last meeting of the Ballymahon (co. Roscommon) Board of Guardians, a letter was read from the L.G.B. asking the Guardians to warn the medicine-contractor that serious notice would be taken in the event of his again supplying drugs or preparations of inferior quality to the Union. The Clerk: That is with reference to a couple of things that were not up to the mark on analysis. I suppose I will write to the contractor and warn him? The Chairman: Certainly.

#### Appreciation.

The members of the Limerick Guardians, with one dissentient, passed a resolution expressing appreciation of the ability, courtesy, and attention to his duties which had been displayed by Mr. J. Hance, while apothecary to the Union for a period of twenty-two years. Mr. Hance is going into business on his own account.

#### Medicine-contracts.

At a meeting of the Castleblayney Board of Guardians last week, tenders for supply of medicines were considered as follows:—P. A. Leslie & Co., Dublin, 5 per cent. off list-prices; Apothecaries' Hall, Dublin, 12½ per cent. off; and Messrs. Boileau & Boyd, Dublin, 15 per cent. off. The last tender was accepted.

At the last meeting of the Ballyshannon Board of Guardians a letter was read from the medicine-contractors to the Board, Messrs. Campbell & Doyle, Belfast, replying to the analyst's report on glycerin of pepsin which had been supplied by them. The firm stated that the B.P. did not give any test for glycerin of pepsin such as the analyst described, and they questioned its efficiency. As to deficiency in glycerin they pointed out that, owing to its hygroscopic properties, glycerin absorbed moisture from the atmosphere if not very carefully stored. The article when sent out was strictly according to B.P., and the firm protested that it was not fair to send an article of a deteriorating nature for analysis after such a length of time had elapsed, seeing that it was supplied to the dispensary in June last. The Chairman agreed that it was hardly a fair test, and the Clerk intimated the delay was on the analyst's part. The point was, he said, that every contractor was bound to supply the medicines up to the B.P. strength, or the Local Government Board would not pay half the cost. The whole cost in that case was only 4*s.* 3*d.*, and he would write the contractors to replace it.

## Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

#### The Bubonic Plague.

The plague has not yet been stamped out, but it is being kept well in hand by the medical and sanitary authorities. No further deaths have occurred, and several of the patients in Belvidere Hospital have been discharged as cured, but to set against these a few additional cases have been admitted, the record standing thus on Wednesday evening:—plague 16, suspects 2, contacts 113. Of those admitted this week

one was a patient who had been ill for some days without giving notice, and consequently all who have been in contact with him will require to be removed to receiving houses for observation. This case illustrates the negligence to which reference was made in this column last week. So far nothing but praise is due to the Corporation and officials for the manner in which they are watching the developments of the scourge.

A scare was caused at Greenock on Monday by the discovery of an outbreak of disease among the crew of the *Clan Macpherson*, trading between Glasgow and the Continent. The disease was, however, not the plague, but malarial fever. Twenty-two Lascars were seized with illness, and all were removed to the Greenock Infirmary. Latest advices say that all are progressing well.

#### Plague Remedies.

The usual crop of remedies has been forthcoming from Anglo-Indians and others. One of these consisted of a mixture, every dose of which contained a teaspoonful of spirit of salt. Referring to this, "Pharmacist" wrote to the daily papers suggesting that spirit of camphor was intended, but the writer stuck to his guns and maintained that he meant what he said. Provided the acid be well diluted there need be no danger apprehended, but a teaspoonful of strong hydrochloric acid undiluted would certainly cause trouble and would be fatal in some instances.

#### Mr. Kerr's Bitter Pill.

At the Dundee Valuation Court on Tuesday, September 11, Mr. Charles Kerr, pharmaceutical chemist, appealed against the increased assessment of his private house from 60*l.* to 70*l.* The lower rate had been in force for twenty years, and Mr. Kerr explained that there was no additional accommodation since last year, the only thing introduced being a kitchen range, and it had been a bitter pill to him, as his wife complained that it only burnt more coals. Mr. Kerr complained about the way in which the district had been looked after by the authorities. He had been resident for twenty-four years in the locality, and during the last fifteen years the Magdalen Green, he declared, had been an open-air brothel. It was proposed to compromise the assessment by making it 65*l.*, but Mr. Kerr angrily objected, and on a vote the valuation was fixed at 60*l.* as before. Mr. Kerr thanked the Court, and on retiring said, "I am sorry I lost my temper."

## French News.

(From our Paris Correspondent.)

**THE CHANNEL CANOEIST.**—The young man who crossed from Dover to Calais in a canoe on Sunday is a pharmacy student named M. Félix Cauchois. He left Dover on Sunday morning in the canoe, and crossed the Channel entirely alone and unattended, reaching Calais on Monday at 10 A.M. The young pharmacist received quite an ovation at Calais. I learn that M. Cauchois is a student at the Paris School of Pharmacy, and was spending his holidays at Dover. The canoe was a little over twelve feet long and about twenty inches wide in the centre. A paddle was his only propelling-power. Some distance out from the shore the waves became troublesome, and washed into the boat. He cleared the water out as quickly as possible by means of a large sponge, but the water got into his compass and he lost his bearings. Luckily he came across the lighthouse boat on the Sandettie Bank (twenty-four miles from Dover and sixteen from Calais) towards 4 o'clock in the afternoon. On the invitation of the captain he spent the night there, and started again at 6 o'clock on the Monday morning. M. Cauchois covered about thirty-five miles' distance in all, by reason of the currents, and his journey is the first recorded successful attempt of the kind. He would appear to have too venture-some a spirit to persist in pharmacy as a calling, but in any case he has shown a capacity for "paddling his own canoe" that should be a good forecast for his future success in life.

THE ASSOCIATED CHAMBERS OF COMMERCE of the United Kingdom terminated their congress in Paris on Saturday, September 8, and from first to last the gathering proved eminently successful. In fact, "Veni, Vidi, Vici" would

appear to be an appropriate motto for them to adopt, for never before has the French Government done so much to render the visit to Paris of a body of business-men so agreeable, or given them so much official recognition. It is evident that there was an earnest desire on the part of the Government and the general manager of the Exhibition, M. Picard, to make the delegates understand that the supposed ill-feeling in this country towards Great Britain is of the shallowest kind. If the result is to induce English-speaking people to come over in larger numbers to Paris to visit the Exhibition during the eight or nine weeks that it is still to remain open, then a very desirable end will have been attained, to the advantage of both countries. As regards the business meetings of the Congress, they were ably presided over by Lord Avebury. Sir Albert Rollit, M.P., Mr. Holland, M.P., and Mr. C. T. Monk, M.P., were also amongst the prominent speakers. The proceedings comprised nothing of direct interest to pharmacists, but the following resolutions may be mentioned:—

**TRADE-MARKS**, by the London Chamber, proposing: "That in view of the serious inconvenience resulting to British manufacturers in consequence of the unsatisfactory working of the present Acts relating to trade-marks, it is desirable that this Association support the action of the London Chamber of Commerce in introducing a Bill to amend the said Acts, and that this Association urge upon the Board of Trade the institution of an immediate inquiry into the grievances complained of, with a view to adequate legislation thereon."

**METRIC SYSTEM**, by the Liverpool Chamber, proposing "That, in view of Parliament having already passed the Weights and Measures (Metric System) Act, 1897, permitting the use of metric weights and measures, an effort should be made by this Association to promote the introduction into Parliament in the coming Session of another Bill to give effect to the following further recommendation of the Select Committee of 1895—viz., that after a lapse of two years from the passing of a permissive Act, the metric system be rendered compulsory by law."

Mr. Hounsfield's resolution, having for its object to obtain for the British colonies the most-favoured-nation treatment, is also worthy of attention. It will be remembered that the French Government has recently modified the tariff on certain imported articles, including spices and vanilla, and those from the British colonies will have to pay practically double the minimum rate payable by more favoured places (see *C. & D.*, May 26). Mr. Hounsfield, who is Vice-President of the British Chamber in Paris, simply moved that the attention of the British Government should be called to the matter, and this motion was adopted without dissent.

#### Proprietary-medicine Congress.

The first International Congress regarding pharmaceutical specialities was held in Paris last week, and proved to be a fairly representative gathering of French makers of pharmaceutical specialities, though in the course of the proceedings the Chairman gave a sort of apology for the lack of organisation. It will be remembered that proprietary medicines cannot be patented in France, and one of the objects of the gathering seemed to be to get a wedge in for improved conditions for the sale of pharmaceutical specialities in this country. This would act as a lever in perhaps facilitating the final passing of certain clauses favourable to "patents" in the pharmacy law now before the Chamber of Deputies, and in some measure checkmate the very pronounced anti-speciality movement (rampant in some parts of the country) amongst French pharmacists. There were more than 600 adherents, and although those who attended were chiefly connected with the French wholesale trade, other countries were represented. Mr. Pickering (of Messrs. Newbery & Sons, London) was present throughout the sessions, and a few American patent-medicine men were there, too; while some Italian, Belgian, and Swedish manufacturers were represented, and most of the countries of the world appeared on the delegates' list. The leading French pharmacists severely boycotted and generally ignored the gathering. The meeting opened with fair punctuality on the Monday. The Minister of Commerce had been asked to inaugurate the proceedings, and his non-appearance was apologised for. Considering that, according to the strict letter of the law, pharmaceutical specialities are to all intents and purposes illegal in France, his absence is not to



he wondered at. M. Fumouze was in the chair, and he was supported by M. Astier (the pharmacien deputy who claims the paternity of the proposed new pharmacy law), M. Dethan, and others. The Congress was divided into three Sections, the Sections being taken one after the other.

M. Girard read a paper on

#### PROPRIETARY MEDICINES

that had been prepared by someone pretty well up in the subject. He spoke of the good time that is coming when "patent" medicines will represent the major part of the pharmacien's turnover, because they are so much better than medicines dispensed by the pharmaciens themselves. When this is achieved cutting, he thinks, will stop—possibly he meant by the law of the survival of the fittest. By extensive advertising and pretty wrappers the public is to be encouraged to take more medicines, and the pharmaciens' customers are in this way to increase. Then he went into figures. To the uninitiated they appeared to apply to patents alone, but in reality they refer to the general trade under the general heading known in France as "Medicaments." The figures M. Girard gave are a trifle misleading. For instance, he quoted Great Britain as having exported in 1898 nearly twenty-five tons of medicaments to France, valued at something like 12,000%. Every English maker of proprietary articles who has tried to export to France will understand that this is a trifle fallacious, in view of the difficulties that are put in the way of such trade. The exportations to Great Britain from France in the same year were quoted at 45,000%. South America was named as France's best customer of medicinal preparations (as in a good many other things), but Brazil, Chili, and other States are beginning to manufacture for themselves. The most interesting part of the report, because the most specific, related to Cuba, which in 1899 imported the under-noted specialities to the value in pounds sterling stated from the countries named:—

|                                | France | United States |
|--------------------------------|--------|---------------|
| Elixirs and emulsions ... ..   | 2,000  | 20,000        |
| Medicated wines ... ..         | 14,000 | 20,000        |
| Syrups ... ..                  | 4,800  | —             |
| Solutions, liquors, &c. ... .. | 3,600  | —             |
| Powders ... ..                 | 1,000  | —             |
| Pastilles and lozenges ... ..  | 1,800  | —             |
| Pills, dragées, &c....         | 14,000 | 20,000        |
| Capsules ... ..                | 56,000 | —             |

Great Britain and other countries also did a little business with Cuba, but the values were not stated, only the quantities. A few hints on how to develop a trade in proprietary articles were given. Advertising on a large scale and conciliating the doctors were the chief items. Advertising in the pharmacists' trade organs (M. Derneville, a Belgian delegate, endorsed this latter opinion) was also recommended as a means of trying to impress the retail trader with the value of the preparations, and obtaining their good will. A pharmacist of Dijon (M. Lafont) inquired if the proprietary, manufacturers would give any kind of guarantee that retail pharmacists such as himself would be assured a profit on patent medicines. He was promptly, but politely, put off; "sat on," one might say.

Section 2 got to work after lunch on Monday. M. Augendre (Maisons-Laffitte) was the Secretary, and he read a paper on

#### PHARMACY LEGISLATION

in the leading countries of the world. He confined his remarks principally to proprietary medicines. Great Britain he seemed to consider, is, as nearly as possible, the Eldorado of patent-medicine makers, because they do as they like as long as the Poisons Act is complied with. The trade in other countries was also referred to, particulars being given of the medicine-duties which are imposed in the respective countries, as well as information as to the treatment of secret medicines. The paper included the following resolutions:—

*First.*—In all countries where pharmaceutical specialities are not admitted free, it is desirable to expedite the unification of the regulations for their importation and sale. Such regulations should

especially consist of a declaration by the manufacturers or their agents, of the active principles of every preparation.

*Second.*—In every commercial treaty it should be stipulated that the medicaments sold under the name and the mark of the manufacturer should be imported into the contracting countries upon condition that the manufacturers submit themselves to the regulations prescribed by the laws of the country into which they introduce their goods.

*Third.*—It is desirable (1) that in countries where Custom-duties are levied *ad valorem*, these duties should not exceed 10 per cent. of the mean value of the products, calculated on the usual wholesale prices; (2) that in countries where Custom-duties are collected as specific duties calculated upon the weight of the goods, the duties should be graduated so that the tax on light or heavy, should be in the same proportion with reference to their value, and not exceed 10 per cent. of the usual wholesale prices.

I remarked to a French manufacturer that this would be against the interest of the proprietary trade in France, and surely they themselves would never press for an open-door policy in the matter of "patents" when they now have the ground practically all to themselves. He gave a smile that inferred a good deal, and I felt time was being wasted.



GOING TO THE BANQUET.

Section 3 heard M. Comar's

#### VIEWS ON TRADE-MARKS.

His paper was long, but the gist of it was that it is an iniquitous thing that medicinal preparations cannot be patented in France. This condition of things ought to be altered, and if anything of real value is ever discovered the State should buy it up and place it on the market *pro bono publico*. He was warmly applauded. Some discussion and general remarks followed, and the resolutions appended to M. Comar's paper were quickly passed. These comprised the following:—

- (1) That medicines should be patentable in all countries
- (2) That all countries should accept trade-marks bearing scientific and other names so long as they are accompanied by another name to show monopoly is not claimed.
- (2) That an inventor or maker's name should constitute a trade property everywhere.
- (4) That a fancy word applied to a medicinal preparation should have protection in all countries.
- (5) That in countries where the sale of any particular medicine



is prohibited the trade-mark of that medicine should be none the less protected.

The closing meeting of the Congress was held the same afternoon. There were discussions, some of them warm, which ended in nothing. A permanent committee (French) was named to try to carry out the resolutions of the Congress. They have power to add to their number.

Other papers were read, but they were of secondary importance. One well-known pharmacist, who is a rabid anti-cutter, tried to get that subject edged in, but he was put down in the most courteous, yet resolute, manner.

The evening was devoted to

#### A MAGNIFICENT BANQUET

at the Palais d'Orsay, the magnificent new hotel by the river, which was delicately limned on the front page of the *menu* card and engraving of which is shown on the previous page.

The dinner was a gratifying success, and more harmony was shown during it than in the whole course of the Congress. Harmony in a double sense, for the company was agreeable, and M. Dèze, of the Conservatoire, directed an excellent musical programme. After the dinner there was a *soirée*, at which several of the leading operatic and musical singers of Paris gave their assistance, and the entertainment finished up with a sparkling comedy, *Ena*.

Throughout the Congress remarks and discussions from the French point of view prevailed almost entirely, but any awkward questions were put off by the explanation that the Congress was international. The meetings were conducted in a brisk and business way, and it is possible that some good may result from the second International Congress, which is to be held at some future time and place which circumstances will decide; for, although Belgium would like it next time, the committee arrived at no decision on the point. Belgium is getting over-generous with her invitations, and steps in with a proposal when all other nations stand aloof.

### Trade Notes.

SOME PEOPLE seem to have the notion that phosferine contains scheduled poison. We have spoken to Messrs. Ashton & Parsons about the matter, and they assure us that it contains no poison whatever—scheduled or unscheduled.

We have received a copy of a circular issued from Merck's London office to the wholesale trade, explaining that the firm do not supply retailers direct. We notice from the list of wholesalers appended to the circular that the leading London and provincial drug-houses stock the chemicals.

A NEW FLUID-BEEF.—A partner to "Lemco" has been created by the Liebig's Extract of Meat Company (Limited), 9 Fenchurch Avenue, E.C. It is happily named "Oxo," and is a semi-fluid beef-extract of agreeable taste and nutritive qualities. It is nicely got up, as may be judged from the illustration, and is neatly packed in strong paper with red lettering, and an elastic band to keep all secure. The price (10d. per 2-oz. bottle) is likely to commend it to the million, and even in such a keenly-contested field as the meat-extract trade "Oxo" is full of possibilities. The far-seeing pharmacist should note this.



ALMANACKS AND CALENDARS.—We have received from Messrs. J. Townsend & Son, chemists' printers, London and Exeter, an assortment of styles in calendars, almanacks, and business cards for chemists, which the firm have just introduced. The "Universal" almanack for 1901 (in light-blue or khaki covers) contains, besides the usual features, a *résumé* of the South African war, and many illustrations of our prominent military leaders adorn its pages. The "Bouquet" almanack, as its name implies, is a dainty

creation with an attractive coloured cover, while the "Purse" almanack is a miniature affair for vest-pocket use. A selection of patterns of engraved labels for proprietary articles is also included in the list, and a specimen of "Pine-tree" toilet-paper, serrated—a nice-looking good-class paper, which is sent out in gold and colour cases. Samples will be sent by the firm to any C. & D. subscribers who ask for them.

MR. WILLIAM BOWEN, pharmaceutical chemist of Mombasa, British East Africa, manager of the Eastern Advertising Agency, announces in our Coloured Supplement this week, that he is prepared to push proprietaries, perfumery, soaps, and other articles by means of handbills and showcards in British East Africa. His system consists of the house-to-house distribution of circulars, and the placing of showcards in prominent places with storekeepers. The Eastern Advertising Agency have already been successful in introducing several proprietaries into British East Africa.

THE LATEST "SOLOID."—To meet a growing demand for a permanganate preparation of weaker potency, Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., have supplemented their 5-gr. "Soloid" potassium permanganate with one of 1-gr. strength. These "Soloids," which we have examined, needless to say, are as near perfection as is possible in finish and accuracy, and are particularly suited for the instantaneous preparation of antiseptic and disinfectant solutions. A 1-gr. "Soloid" dissolved in 2 oz. of water provides a ready-made injection, lotion, or gargle.

INCOME-TAX OVERCHARGES.—The Income-Tax Adjustment Agency (Limited), 12 and 13 Poultry, E.C., draw attention to the fact that the preparations of the Inland Revenue for the demand for the first payment of income-tax, at the rate of 5 per cent. upon the amount of the income, are well advanced, and the blue notices of charge are now being delivered. Notice of appeal in any cases where necessary must at once be given. If appellants can furnish an account of their business transactions the best course is to appeal to the "Special Commissioners." Moreover, if traders find that the profits of the three years ending April 5, 1900, show an average profit less than the amount upon which they paid tax for 1899-1900, they should give notice of appeal in respect of that year also, and claim repayment of the amount overpaid. Many people are now entitled to make a claim for three years to April 5 last, where the income arises from investments, even when dividends are paid "free of income-tax," and the tax recoverable might amount to over 30%. The Agency offer to advise our readers gratuitously whether they are entitled to any repayment on their sending full particulars of their incomes from all sources and a stamped directed envelope for reply.

BEIERSDORF'S PLASTERS.—Messrs. P. Beiersdorf & Co., of Hamburg, are manufacturers of all those modern external applications, such as plasters and mulls, which Dr. Unna's skill as a dermatologist have made familiar to medical men. They send us a few samples of the products, especially those which are adapted for retail sale by chemists and druggists. We briefly note a few of these:—

Corn-rings.—An I.R. ring, with narrow bands of adhesive material to keep the ring in place on the toe. Put up in neat envelopes, with directions.

Yellow Adhesive-plaster.—A strong and flexible I.R. combination on fine cotton.

Zinc oxide G.P. Plaster-mull.—Made according to Unna's formula. Resembles adhesive plaster, but is much more tender and healing. Put up in envelopes, with customer's name and address, and should make a good novelty for counter-sale in cases of skinned surfaces.

Salicylic acid Plaster-mull (green) for corns is put up in the same style.

Tricoplast.—A combination of soap plaster and salicylic acid (5 per cent.) for eczema.

Salve Mulls.—According to Dr. P. G. Unna coated on one side. All combinations, and beautifully made.

"Umbeline."—Circular pad for adhesive application to the umbilicus.

Mercolint Bib.—A felt-like fabric which contains finely-divided metallic mercury that evaporates when worn, and is thus absorbed by the patient. The bib is specially adapted for prolonged use, or between more active courses of treatment.

All these goods are provided with English directions, and our subscribers can obtain samples and full particulars from the manufacturers' agent for Great Britain—viz., Mr. Hugo Lorenz, 7 and 8 Idol Lane, London, E.C.



## East Indian News.

**A NEW DISPENSARY.**—An estimate, amounting to 25,600r., for constructing a dispensary for women and children with apothecary's quarters, at Cocanada, in the Godavari district, has been sanctioned.

**LARGE ORDERS FOR MEDICAL STORES.**—The Government have sent home a large order for medical stores wanted immediately to enable a complete equipment for four general field hospitals of 500 beds for China.

**CROWS AND CHOLERA.**—A correspondent of the *Indian Forester* cites a well-authenticated case of crows disappearing simultaneously with an outbreak of cholera. With cholera fast disappearing the crows are again mustering in their former numbers.

**MADRAS** has become an important storing-place for kerosine and petroleum, and a line of oil-driven steamers makes this one of its chief ports of call, while experiments have been made as to the advantages to be derived from using oil fuel to work engines on the Madras Railway.

**SALE OF A BUSINESS.**—The business known as Beynon & Co., English chemists of Esplanade Road, Bombay (the property of Messrs. Bertie-Smith & Co.), has, in the scheme for the conversion of the firm into a limited-liability company (noticed in our last issue), been sold to a native for 20,000r.

**THE PASTEUR INSTITUTE AT KASALI** opened on August 9 with fourteen patients, and seventeen more are now under treatment. Of the thirty-one patients, sixteen are British officers and soldiers. The Government of India has thus already saved by the Kasali Institute more than the place cost to establish, as formerly patients were sent to Paris.

**THE MALARIAL MOSQUITO.**—The medical men at Ootacamund have been discussing the question as to whether the mosquito, which is now so common in this hill station, is the malarial mosquito, prevalent in the malarial parts of the district. The question was finally settled when one of the insects was caught and examined microscopically at St. Bartholomew's Hospital, when it was found to be identical with the malarial *Anopheles*.

**A DANGEROUS CONSIGNMENT.**—The s.s. *Clan Urquhart*, with a shipment of sulphuric acid for Calcutta, reported on arrival at Bombay several barrels of the acid having exploded on the voyage out. While landing the barrels on the wharf, some others exploded and severely burned three coolies. Two days afterwards four more barrels burst, injuring six other coolies working on the jetty. When the mail left, the consignees were in a quandary, as they had been called upon to remove the acid, but found it impossible to induce labourers to go near it at double the usual rate of pay.

**POISONINGS IN INDIA.**—The report of the Indian chemical analyst, which has been received by the Indian Government, shows that in 224 instances during the past five years arsenic was used, and caused 125 deaths. It is reported that there are many persons at large who gratify their feelings of revenge or covetousness by means of arsenic and other poisons. In one case a man poisoned the food of eight persons with arsenic, mercury, and copper salts, and in another seven of a family were poisoned with arsenic and one died. There are many cases of a similar nature, and it is due to the easy method in which purchases of arsenic can be made that such disastrous results are attained. The Bombay Code contains an Act passed in 1866 "to regulate and restrict the sale of poisons in the Bombay Presidency," by which no person shall sell any of the poisons specified in the schedule without holding a licence under the Act. The penalty is for the first offence a fine which may extend to 200r. A licensee is also required to keep a poisons-book, and register therein in each case the name of the purchaser and the purpose for which the poison is required. The purchaser has to affix his signature or mark to the entry. For some reason or other the Act is apparently a dead letter. It is possible that this may be due to the wording, which is somewhat intricate and involved. Perhaps a simpler measure might be more easily worked. The subject in the meantime presents

features sufficiently grave to demand attention. There is clearly something wrong when any ordinary individual can so easily obtain enough arsenic to poison a whole family.

## South African News.

(From our Cape Town Correspondent.)

**LICENCES TO PRACTISE MEDICINE** in the Colony of Cape of Good Hope have been issued to the following practitioners:—Paul Kranzle, James Campbell McNeillie, M.B., Georges Hertig, Heinrich Homberger, William Voogbt Ditchman, L.D.C. Dr. McNeillie is the only one on the British register. He was formerly in Boksburg, Transvaal.

**THE B.P. FOR FIVE TERRITORIES.**—A Government notice has appeared in the *Gazette* to the effect that the British Pharmacopœia, 1898 edition, shall, on and after September 1 next, come into operation in the following territories:—(1) Tembuland, including Emigrant Tembuland and Bomvana-land; (2) Transkei, including Gealekaland; (3) Pondoland, including East and West Pondoland; (4) Port St. John's; (5) Griqualand East.

**TRIED TO "LARD" THE FINE.**—Three general dealers were brought before the A.R.M. at Cape Town, on August 21, for selling lard not of the nature and quality demanded by the purchaser. One of the offenders in the course of his evidence declared that the cotton-seed stearin found in the lard was not injurious, and that there was no intention to defraud. A fine of 3*l.* was inflicted; the other two offenders got off by paying 2*l.* 10*s.* each.

**SOAP.**—It would seem that Port Elizabeth—the Liverpool of South Africa as far as trade goes—has more than one grievance against the Government outside the truck question. The Manufacturers' Association there complains bitterly of the apathy of the Government in the matter of duties levied on raw material used in the manufacture of soap. Makers there want raw material to come in free so that they can compete with European houses, and the Hon. Mr. Wilmot will move later on in the Session that a Select Committee be appointed to inquire into the matter.

**ROBBERIES IN AND AROUND CAPE TOWN** have been frequent of late; jewellers' stores have been relieved of valuable stock, and safes cut open as if they were sardine-tins. The manager of Messrs. Petersen's Adderley Street pharmacy recently found that his room, located over the shop, and entrance to which is made by independent stairs, had been entered by means of a skeleton key, his baggage ripped open, and his papers in the shape of share-certificates gone, also his certificate of pharmacy, and money. The papers were found intact next day in an outhouse, but, needless to say, the money did not return.

**THE CAPE ANALYST'S** report for the quarter ended June 30 last has little in it directly interesting to the drug-trade. Fines have been imposed upon people who sold milk preserved with formaldehyde—in fact, the sale of a milk containing 1 of the preservative in 10,000 was considered as heinous an offence as a sale of milk containing 20 per cent. of added water, 3*l.* being the fine in each case. Mr. Juritz has some curious percentages in his report—*e.g.*, coffee, with 101, 300, 354, 233, 100, 170, and 140 per cent. of chicory and other diluents added. When one compares these figures with percentages of fat abstracted from milk (*e.g.*, 20, 11, and 13) one must either get into a mental muddle or feel that there is no uniformity in the official methods of stating percentages.

**MANUFACTURE OF DYNAMITE.**—The De Beers Company have now obtained the necessary licence to establish a dynamite-factory on the coast near Somerset West Strand, the company paying something like 6,000*l.* for the ground. When it became known that an explosive-factory was to be erected, the Divisional Council of Stellenbosch and the local Bond political agents opposed the scheme for all they were worth, for, as the Hon. Mr. Neethling, M.L.C. for the division, pointed out in a speech in the Legislative Council on August 16, the electorate would be swamped by the Progressives. Some 1,200 workmen, white and coloured,



are to be employed, and about 80,000*l.* per annum will be spent by the company in wages alone. In the discussion in the Council the Hon. Mr. Herholt, Minister of Agriculture in the late Schreiner Ministry, spoke very forcibly on the subject of trying to work the country on party politics in the matter of industries. He took full responsibility for the sale of the ground, and his late chief's conduct had, he said, been just what one would expect from those who had the pure administration of the country's affairs in hand. Other hon. members spoke in a similar strain.

**THE OPENING OF THE RAND.**—Following on Lord Roberts's proclamation of the annexation of the Transvaal, Laffan's agency, in their cablegram to the *Times* dated September 3, say that the Rand mines which have reached the producing-stage will be able to start crushing as soon as a moderate number of workers return to work, but that development work will probably be delayed some three months longer. In the meantime Colonel Girouard, the Director of Railways, has suggested that the various mining bodies should combine to spend 500,000*l.* upon rolling-stock for the purpose of running the new Springs, Rand, and Vereeniging railway. Eleven thousand Kaffirs are at present employed on this railway, which will tap the Witwatersrand, and these mining companies which have adopted Colonel Girouard's suggestion intend to place an order at once for 300 trucks and fifteen engines, to be delivered next June. Unfortunately, so far as the general return of the population to Johannesburg is concerned, facilities are notable by their absence, and the question of rolling-stock would become desperate in the event of the destruction of the 8,000 trucks and 200 engines now in the possession of the Boers, and massed at Selati in the north of the Transvaal. To replace these would take eighteen months, and the half of the population would have to be kept back that time, as it would not be possible to work the mines fully without supplies of coal, nor could the population be supplied with necessary food.

## Colonial and Foreign News.

**THE IMPERIAL HEALTH INSTITUTE** of Berlin is publishing a pamphlet for distribution among the people, giving hints as to the treatment of tuberculosis and good counsel generally.

**DR. SCHWABE**, the editor of the "Pharmacopœia Homœopathica Polyglotta," states that a new edition will shortly appear, a commission of homœopathic doctors, pharmacists, and chemists being at work upon it.

**A TURKISH UNIVERSITY.**—In commemoration of the Jubilee of the Sultan of Turkey it is stated that a university, as well as a medical college and hospital, will be established at Constantinople which will surpass anything of the kind in Europe.

**THE WAR IN CHINA.**—The Grand Ducal Government of Baden has decided to grant the use, free of every charge, of their bathing establishments with all their therapeutic appliances to all wounded officers and soldiers of the allied forces fighting side by side in China. Applications have to be addressed to the secretary of the committee, Dr. O. Rössler, chemist, Baden-Baden.

**HONEY-ADULTERATION.**—The Minister of the Interior has issued a notice to the Wurtemberg police authorities enjoining them to watch carefully the trade in honey, giving particular attention to those kinds of honey and preparations resembling honey which are brought into trade under deceptive names. In suspicious cases samples of the goods are to be taken and analysed, and fraudulent cases or suspected factories are to be reported to the Minister.

**AMERICAN SULPHUR COMPANY.**—This is the title of a concern in New York which has been formed to work the sulphur-mines in the Taorah Mountains, a distance of eighty miles from the seaport of Arica, Chili. The plans of the company are still in embryo, but New York is to be the receiving-dépôt of the output. To establish refineries at Arica would mean investment of the greater part of the capital of \$5,000,000: the transportation of machinery and of coal would also be a matter of great expense. It is therefore possible that the raw sulphur should be taken to New York. The deposits

of sulphur in the United States are said to be numerous, and are being worked in many places, California, Louisiana and Texas being notable instances, but conditions are so unfavourable that the firms engaged are not realising any profit. At present the trade in the United States is controlled by the Anglo-Sicilian Sulphur Company. The current price is \$22.50 per ton, which is higher than usual, owing to lack of freight, it being almost impossible to charter any steamers.

**THE GERMAN PHARMACEUTICAL SOCIETY.**—The annual meeting of the German Apotheker Verein was, on the whole, a very tame affair this year, especially after the excitement of the last assembly. The decision of the commission appointed last year to study the best system of conducting German pharmacy was almost unanimously accepted, and a note will shortly be published to induce the different Governments to allow the holders of Concession-Apothekes to sell their pharmacies when so disposed, instead of returning them to the State. It was also decided to ask the manufacturers of specialties to allow apothecaries more profit on patent medicines, &c., and also to obtain Government permission to make an extra charge for night-duty. The proposition to allow women with less instruction to act as second-class assistants was rejected. Professor Dr. Schmidt discoursed on "The Competition of Chemical Industry with Nature in the Production of Perfumes," and Dr. Paul spoke on "The Relations of Pharmaceutical Chemistry to Bacteriology." Hanover was chosen for next year's meeting.

**ADULTERATED BORAX.**—From a report in the *New York Commercial* it appears that the retail market in New York is flooded with packages of stuff labelled "Borax," much of which is glaringly adulterated. At a large number of grocery and department stores, no matter what the brand, the dealer is always sure that the borax is pure, but the most brazen adulterations are marked as "Best refined" and "Chemically pure." Almost every grocery store has a different brand of borax. In one case—in which the grocer assured his customer that it did not matter what kind he bought as it was all the same, only put up and labelled differently—the "borax" the grocer was selling happened to be more than three-fourths sodium bicarbonate. Twenty boxes of borax, of different makes, were bought at random in New York City by a representative of the *Commercial*, only eight of which were found to be unadulterated. In several cases the same firm put two brands on the market, one pure and the other the cheapest kind of a substitute. The explanation is, that a part of the trade demands the cheapest stuff that can be made, and does not care whether it is borax or not. The adulterations, according to Dr. J. F. Geisler, are chiefly bicarbonate or carbonate of sodium, and some of the samples proved to be a very inferior grade of borax.

**NOT "LEMONADE" IN U.S.A.**—Mr. William Park, the New York representative of Messrs. G. Foster Clark & Co., proprietors of "Eiffel Tower Lemonade," was summoned at New York on August 14 for selling "what purported to be 'lemonade,' but was in reality a chemical compound." According to an analysis made in Pennsylvania by the chemists of the Pure Food Department, and by Dr. John Marshall of the University of Pennsylvania, the mixture was principally composed of tartaric acid, citric acid and sugar. The prosecution said they had no desire to prevent the sale of "Eiffel Tower Lemonade," but it must be sold for what it really was, and the case was adjourned to allow the defendants to produce analysts to contradict the testimony of the prosecution. Meanwhile an advertising circular to the following effect has been issued:—

We have much pleasure in announcing that after a most exhaustive test by all the State chemists of Pennsylvania, our goods have been passed by the Pure Food Commissioner. This decision confirms the assurance we have given the trade that our product was pure and wholesome. Owing to the distinctive feature of our lemonade that it is composed of the product of the lemon and grape, the food authorities claim it must be known as "Eiffel Tower Artificial Lemonade," so that in future on each package will be printed "Eiffel Tower Artificial Lemonade," which conforms with all the requirements of the Food Department.

From the foregoing paragraph it would appear that the matter has been arranged.



## Pharmaceutical Society of Ireland

### COUNCIL-MEETING.

THE Council met on Wednesday, September 5, at 67 Lower Mount Street, Dublin. Mr. George D. Beggs (President) occupied the chair, and the other members present were Messrs. W. F. Wells, Montgomery (Belfast), Turkington (Cookstown), Kelly, Browne, Dr. Walsh, and Professor Tichborne.

### A FINE NOT ABATED.

A letter from the Under-Secretary, Dublin Castle, stated, in reference to the case of William J. Gibson, chemist and druggist, of Belfast, who had been fined 10*l.* for compounding medical prescriptions, that the Lord-Lieutenant, after a full consideration of Mr. Gibson's memorial asking for an abatement of the penalty, had decided that the law must take its course.

Dr. WALSH: Satisfactory.

### DRUGGISTS MUST BE 21.

A letter from the Clerk of the Irish Privy Council enclosed an order approving of the regulation which the Council of the Society had made requiring that all candidates for the Registered Druggists' examination should be at least 21 years of age.

Reports from the Law and House Committees were dealt with and adopted.

### REAPPOINTMENT OF EXAMINER.

The PRESIDENT said he had pleasure in moving that Mr. A. Forbes Watson, B.Sc., be re-elected examiner for the Society in pharmaceutical and general chemistry. Mr. Watson had given them every satisfaction since he undertook the examination.

Mr. BROWNE: How long has he been with us?

The PRESIDENT: A couple of years. Mr. Watson had done everything he could to forward the interests both of the Society and of the candidates, and they could not have a better man for the office of examiner.

Mr. KELLY seconded the motion, which was unanimously agreed to.

On the motion of Mr. WELLS, seconded by the PRESIDENT, Messrs. Kelly and Browne were appointed scrutineers of the ballot at the forthcoming annual election.

### MIXING BY DRUGGISTS.

Mr. TURKINGTON moved, pursuant to notice, the following resolution:—

That registered druggists' certificates shall be in the words of Section 5 of the Pharmacy Amendment Act—viz., "Entitled to keep open shop for the sale, retailing, or mixing of poisons"; and that all registered druggists sending in their certificates may have the words "or mixing" inserted therein.

The way in which their certificates were worded had been a grievance to the druggists ever since they got them. It was only the half of what they were entitled to. The Council made a great mistake in framing the certificate as they did, and he was surprised that the Privy Council put it in force. The examiners in signing "for the sale of scheduled poisons" had not gone according to the Act of Parliament. The insertion in the certificate of the words "or mixing" would mean a great deal in the eyes of the public. As long as this state of things continued there would be friction and irritation, and the Council could not expect the druggists to fall in with their wishes and desires for the prosperity of the Society. Therefore, the sooner the matter was rectified the better. The certificate of the pharmaceutical chemist had the words "compounding medical prescriptions and selling poisons."

Mr. WELLS: They are not in the pharmaceutical licence.

The PRESIDENT said the privilege of compounding medical prescriptions was the sole right of the pharmaceutical chemist, and what he passed his examination for. The certificate to which Mr. Turkington objected had been sanctioned by the Privy Council, and if it were departed from now they would have to get authority from the Privy Council to issue a new certificate. The words of Section 5

of the Amendment Act, which established a register of druggists, were—

All persons so registered shall be entitled to keep open shop for the sale, retailing, or mixing of poisons provided that nothing in this Act shall be deemed to confer on such persons any right to compound medical prescriptions.

Mr. WELLS asked Mr. Turkington if he would have all those words in the certificate.

Mr. TURKINGTON: Certainly.

Mr. WELLS said that if a new certificate were framed and all those words were not put into it perhaps somebody would say that the certificate was illegal. But it was the examiner who gave the certificate, and not the Council.

Mr. TURKINGTON: Does he read the Act of Parliament?

Mr. WELLS said Mr. Turkington was accusing the Council of having knowingly done something to injure their druggist brethren. But they had never done anything of the sort. They never intended to take anything from them.

The PRESIDENT said if the certificate were altered the whole clause should be put in, so as to show that registered druggists were not entitled to compound medical prescriptions. If a certificate containing the words, "sale, retailing, or mixing of poisons" were exhibited to the general public, he feared they would not distinguish between the certificate of the registered druggist and that of the pharmaceutical chemist, who had the sole right of compounding prescriptions. He (the President) feared that if the certificates were altered as suggested it would be a means of inducing the registered druggist to compound prescriptions. He regretted to say that all the registered druggists of Ireland were not of the same mind as Mr. Turkington, who acted strictly in accordance with the letter and the spirit of the law, and they (the Council) had the fullest confidence in him, as well as the greatest pleasure in having such as Mr. Turkington on the Council.

Mr. TURKINGTON: Thank you.

The PRESIDENT said, speaking of the registered druggists as a general body, that they did not respect the law, but compounded as much as they could. He (the President) would be in favour of altering the certificate if all the concluding words of Section 5 were put into it.

Mr. TURKINGTON: Certainly. It would be a means of making them observe the law better than they do. If I cannot live by keeping the law I will never live by breaking it. (Hear, hear.)

Mr. WELLS: The pharmaceutical chemist's certificate does not say anything about "compounding prescriptions." It merely says that the candidate, having been examined in botany, materia medica, and chemistry, is qualified "to act as a pharmaceutical chemist." The words of the registered druggist's certificate are: "I hereby certify that — has passed the examination conducted by me, and is hereby qualified to sell the scheduled poisons." But the certificate was not evidence in a court of justice. The register was the only evidence of the qualification of the person.

Mr. TURKINGTON: The wholesale druggist can sell scheduled poison, without a certificate at all.

Mr. WELLS: I doubt that. I think that no man can sell poisons, wholesale or by retail, unless he is a registered druggist.

The PRESIDENT asked the Registrar for copies of the certificates, which were laid on the table.

Mr. MONTGOMERY said he seconded Mr. Turkington's motion on the condition of his agreeing to the insertion of all the words of the clause in the certificate.

Mr. WELLS said he should be sorry to propose anything that had the appearance of being antagonistic to the registered druggists; but at the time when the present form of registered druggist's certificate was adopted they had two registered druggists on the Council, and the matter was fully threshed out, and the reason why the present form was adopted was that it was believed that if a certificate were given with more than that on it, as Mr. Turkington now suggested, it would be used as a handle for illegal compounding. He (Mr. Wells) was present at a prosecution in Belfast of a druggist for illegal compounding, and the ingenious defence was put forward that, as the Act gave him a right to "mix poisons," and as the prescription for which he was prosecuted contained poisons, he was justified in compounding it. That showed what some druggists would

do. He was sorry to say that there were dozens and dozens of registered druggists throughout Ireland compounding prescriptions at that moment. Were they to assist them in any way?

Mr. TURKINGTON said his proposal would not assist them, but debar them from breaking the law.

Mr. WELLS said it would be impossible to make Mr. Turkington's proposal retrospective. They could not get the examiners who had signed the old certificates, and who had gone out of office, to sign new ones. They had never done anything like that. If a pharmacist lost his licence they only gave him a statement on a sheet of paper that he was registered. But if Mr. Turkington's motion were carried every registered druggist in the country would come forward and ask for an amended certificate.

Dr. WALSH asked, Would Mr. Turkington be satisfied with the words "hereby qualified to act as a registered chemist?" The certificate would then be on the same lines with that of the pharmaceutical chemist.

Mr. KELLY said he regretted to oppose anything that Mr. Turkington brought forward, but he thought it would be better to leave the certificate in question as it was.

Professor TICHBORNE said he was present at the trial of an action for the poisoning of a dog, at which it came out in evidence that the entries in a poison-book were altered by the seller after he had made them.

Dr. WALSH was about proposing an amendment to the effect that all the final words of Section 5 should be put into the registered druggist's certificate, but

Mr. TURKINGTON, with the sanction of the Council, withdrew his motion, because it could not be made retrospective, nor could what he wished be added without inserting other clauses.

#### COMPANY-PHARMACY.

The PRESIDENT said he now desired to supply an omission on his part at the last meeting of the Council, by moving a vote of thanks to the Irish members of Parliament who had given them such able assistance in the House of Commons in getting Clause 2 of the Companies Bill thrown out. Their best thanks were due to Mr. Field, Mr. Austin, Mr. Patrick O'Brien, Mr. MacAleese, and Mr. John Redmond, and other Irish members, for the able help that they gave them in the matter. They gave them every assistance that they could, and Mr. O'Brien especially was indefatigable as far as his time allowed. It would therefore be a graceful act to pass a vote of thanks to them.

Mr. WELLS: And the other Irish members.

The PRESIDENT: The Nationalists helped us all in their power.

Mr. KELLY seconded the motion. He remarked that he was in the House of Commons along with the President and Vice-President, and saw how much time and attention the gentlemen named gave to them. Mr. Field treated them exceedingly nicely, and Mr. Redmond also gave them an interview, and told them he would do all in his power to forward their views. Mr. MacAleese also assisted them, and Mr. Austin stood by them until the clauses were thrown out. He (Mr. Kelly) was sure that if those gentlemen were instructed as to the injustice of company-pharmacy they would assist the Council if the latter should themselves propose legislation on the subject.

The PRESIDENT said he saw an announcement in THE CHEMIST AND DRUGGIST last week that the English Pharmaceutical Society were formulating a new Bill. He came away from London after meeting the English folk thoroughly convinced that they were willing to join with the Irish Society in any new Bill that was to be formulated, and he was grieved when he saw the announcement that a committee had sat to draw up the clauses of a new Bill. He certainly thought that when the Irish Society had worked so hard to get the objectionable clauses thrown out of the last Bill, and after the way in which some members of the English Society had spoken to them, they ought to have given them some hint that they were going to formulate a new Bill, and to have allowed that Council to have something to say on the matter. Of course their Bill would not do on all-fours for Ireland; but the Council could have gone a certain length with them, and they could have assisted each other.

Mr. WELLS: Would it not be better to let them get a Bill

of their own, and let us try to get one for ourselves? Of course, if the measure were one to apply to both countries it would be a different thing; but what they are going to do is to formulate a Bill to amend the English Pharmacy Act. That will not touch us, and I should be very sorry that it did.

The PRESIDENT: From the conversations I had with them I thought that views might have been exchanged.

Mr. WELLS: If we want any amendment we can get it separately.

The motion of the PRESIDENT was then put, and unanimously carried.

Other business having been disposed of, the Council adjourned.

## Marriages.

CUSSONS—KIDD.—On September 12, at the Swinton Wesleyan Church, by the Rev. Arthur Whetnall, Alexander T. Cussons, of the firm of Cussons, Sons & Co., to Emily J., younger daughter of the late John Kidd, both of Swinton.

HOPKINS—MOSS.—On September 3, at St. John's Church, Lewisham High Road, by the Vicar, the Rev. R. W. Atkinson, M.A., Percy Brook, youngest son of R. H. Hopkins, Wickham Gardens, Brockley, to Gertrude, elder daughter of John Moss, 39 Tressillian Road, St. John's, S.E.

MORRISON—RODGER.—At Wemyss Cottage, Grangemouth, on August 28, by the Rev. Miles Thomson, David Russell Morrison, chemist and druggist, Bannockburn, to Agnes, second daughter of Mr. David Rodger, Grangemouth.

ROWLAND—DUNCAN.—At Edinburgh, on September 6, by the Rev. J. B. Hastings, D.D., assisted by the Rev. R. E. Coates, B.D., Manitoba, George Howard Charles Rowland, chemist and druggist, to Annie Brown, elder daughter of Mr. William Duncan, Edinburgh.

## Deaths.

BAYLEY.—At his residence, Silver Hill House, Brownhills, on August 26, Mr. Joseph Thomas Bayley, pharmaceutical chemist. Aged 72. Mr.

Bayley was at one time in business as a pharmacist in Walsall, but left there many years ago for Brownhills, where he successfully continued in the High Street, retiring a few years ago. He was a much-respected townsman, for though naturally modest and retiring, he devoted much of his time when in business and since to public affairs, his special knowledge of technical matters being of benefit to the town. He took a part in establishing the Brownhills Local Board, and was one of the promoters of the gasworks, and for years was a director and chairman of the company. He also took an active interest in the technical-education work of the country. For many years he was Chairman of the Brownhills District Council. In other directions his work for the community bore fruit, and he was highly respected in the district. Mr. Bayley is survived by a family, Mr. Joseph B. Bayley, chemist and druggist, Lichfield, being a son.

BIRDSEYE.—The Mincing Lane drug-trade has lost a familiar figure in Mr. Edward Joseph Birdseye, junior partner in the firm of Messrs. Bowyer & Bartleet, produce-brokers, 147 Fenchurch Street, E.C., who died at his residence at Lewisham Park, S.E., on September 4, at the comparatively early age of 48. Mr. Birdseye had been ailing for the past six months, and latterly little hope was entertained of his





recovery, as he suffered from cancer of the liver. Mr. Birdseye had been connected with his firm since it was founded in 1867 by the late Mr. F. W. Bowyer and Mr. F. Bartleet. In 1896 he was admitted into partnership, being associated with Mr. F. E. Annison in the conduct of the business. All who knew Mr. Birdseye respected him highly for his business integrity and his kindly disposition, it being said of him that he had never made an enemy in Mincing Lane during the thirty-three years of his career. We understand that his death will make no change in the business of the firm. Mr. Birdseye was twice married, and leaves a widow and four children, the eldest son taking his father's place as partner.



**GUTHRIE.**—At Richmond, on September 7, Mr. John Alexander Guthrie, of Kirkpatrick, Barr & Guthrie, chemical-merchants, Cullum Street, E.C. Aged 43. The late Mr. Guthrie commenced his business career in Glasgow about 1871, entering the firm then known as Caldwell & Middleton. In 1878 he came to London to establish a branch business under the style of Middleton, Kirkpatrick & Barr. He was so far successful that in 1886 he was admitted into partnership. On Mr. Middleton's death the style of the firm was changed, and has since been known as Kirkpatrick, Barr & Guthrie. Mr. Guthrie was a regular attendant on 'Change, where he was held in great esteem for his straightforward and open character and genuine good nature. He leaves a widow and three daughters.



**HOBSON.**—At The Cedars, Moseley, Birmingham, on August 18, Mr. Henry Hobson, chemist and druggist.

**JAHN.**—On September 9, Mr. J. G. Jahn, of 12 Burnt Ash Hill and 21 Mincing Lane, E.C. Aged 63 years. Mr. Jahn was a well-known personality in the Mincing Lane drug-trade. He was born in Nuremberg, and served his apprenticeship to the drug-trade in the old-established firm of Louis Duvernoy, Stuttgart. About 1870 he entered into partnership with the late Mr. William Mehl as an export-druggist, under the style of Jahn, Mehl & Co., but the business not proving a success the partnership was dissolved. Mr. Jahn subsequently obtained the position of market-clerk to Mr. Rohrweger, and upon the retirement of that gentleman he was appointed manager to the drug-department of the firm of Grosscurth & Luboldt, which position he held until 1896, when he joined Mr. G. C. G. Freudentheil, 21 Mincing Lane, E.C., with whom he held power of attorney. He was assisting in the conduct of this business up to within a few days of his death; indeed, he was in Messrs. H. Devitt & Co.'s sample-room when he had an apoplectic seizure, from which he never rallied. Mr. Jahn leaves a widow but no family.

**MELDRUM.**—At Toronto, Canada, recently, Mr. Henry Meldrum. Aged 78. The late Mr. Meldrum was in business as a chemist in Penrith forty years ago.

**SERGEANT.**—On September 3, Mr. John Sergeant, chemist and druggist, Bedford. Aged 72 years. The late Mr. Sergeant was a native of Bedford, where he served an apprenticeship in the dispensary of Dr. Hedley. He started in business in the town, which he carried on for a long

period, and sometime since retired after a successful commercial career. He delivered numerous lectures on chemistry to the members of the Bedford Literary and Scientific Society, and entered the Town Council in 1858. In 1871 he was elected an Alderman, a position he resigned in 1878 on his appointment as Borough Treasurer, in which office he continued up to his death. He was also Secretary and Treasurer of the Corn Exchange, Treasurer of the Bowling Club, and with one exception the senior member of the Stuart Chapter of Masons, of which he was a past W.M. and treasurer. At the funeral on September 7, the Mayor (Mr. Hedley Baxter), members of the Corporation and the police attended, and wreaths were sent by the Masons of Stuart Lodge, and many sorrowing friends.

**DICKIE.**—Recently, Mr. Robert Ferguson Dickie, chemist and druggist, St. George's, Salop.

## Recent Wills.

**CONSTANCE.**—The gross value of the estate of the late Mr. Edward Constance, formerly of 114 Leadenhall Street, E.C., and 65 Charing Cross, W.C., pharmaceutical chemist, who died on April 16 last, has been sworn at 11,404*l.* 0*s.* 11*d.*, the net value of the personality being 11,343*l.* 19*s.* 11*d.* The executors are the testator's sons, Mr. H. E. Constance, chemist and druggist, of 114 Leadenhall Street, E.C., and Mr. S. W. Constance, of 65 Charing Cross, W.C.

**HARDING.**—The estate has been valued at 61,469*l.* 4*s.* 8*d.* gross, including personality of the net value of 44,941*l.* 13*s.* 6*d.*, of Mr. Thomas Harding, of Wick House, Brislington, Somerset, and of the firm of Colthurst & Harding, of Temple Gate, Bristol, oil merchant, who died on May 22 last. The testator bequeathed to his nephew William Beckett Harding 100*l.*, to his son Edward Roach Harding 11,540*l.* and ten-seventeenths of the testator's share and interest in the said firm, and he appointed him as a partner in the business. He bequeathed to Mrs. Harding his furniture and effects, horses and carriages, and he left his residuary estate in trust to pay the income thereof to her during her life, and subject to her life-interest, as to one-sixth each for his son-in-law William Charles Simons and the testator's daughters Ellen and Louisa Harding, and Sarah Thatcher, Grace Dunlop, and Susannah Charlotte O'Callaghan.

**HAYWOOD.**—The will of the late Mr. Thomas Burt Haywood of Woodhatch, Surrey, and of the firm of Messrs. Burt, Boulton & Haywood, chemical manufacturers, 64 Cannon Street, E.C., has been proved in the principal registry at Somerset House. The executors are Mrs. Margaret Louisa Haywood, widow; Charles Burt Haywood, son; and H. W. Bessemer, of Southampton. The gross value of the estate is 250,277*l.* 17*s.* 7*d.*, and the net personal estate 234,814*l.* 6*s.* 7*d.*

**REYNOLDS.**—The will of Mr. Richard Reynolds, pharmaceutical chemist, of Cliff Lodge, Woodhouse, Leeds, and of Reynolds & Branson (Limited), who died on April 5 last, has been proved. The executors of the will are testator's son-in-law, Arthur Rosling Smea, of New Bond Street, cabinet-maker; his nephew, Ernest William Marshall, of Lansdowne Road, Holland Park, architect; and William Fool Husband, of Leeds, barrister, to each of whom he bequeaths 50*l.* To his son Richard Freshfield Reynolds he leaves 1,000*l.*; in trust for his son William Marshall Reynolds, 3,000*l.*, and to him also one moiety of the income of 6,000*l.* 4-per-cent. stock in Reynolds & Branson (Limited), and the income of the other moiety in trust for the testator's daughters, Marian and Emmeline. He bequeathed to his wife, Mrs. Frances Reynolds, 200*l.*, his furniture and household effects, and the income during her life of his residuary estate, which, subject to her life interest, the late Mr. Reynolds left in trust, as to three-twelfths thereof for his son Richard, as to four-twelfths each for his daughters, Marian and Emmeline, and as to the remaining one-twelfth for his daughter, Frances Mary Smea. The late Mr. Reynolds's estate has been valued at 32,954*l.* gross, and 28,404*l.* net.

ONE OF THE ORIGINAL CONTRIBUTORS to "The Art of Dispensing" was Mr. T. Maben, Ph.C., F.C.S. Writing in regard to the sixth edition, he says: "On looking through the new work—and emphatically it is a new work—there is so little that I recognise as my own, and so much that is altogether new, that I feel entirely free to give expression to my admiration of the industry, the patience, and the technical skill that have rendered possible the production of this epoch-making book. The first sight of 'Pharmaceutical Formulas' was a red-letter day to thousands of pharmacists, and I shall be surprised if an equally cordial welcome is not awarded to the new comer, which is in its way a signal a triumph."



## The British Association.

THE sessions of the British Association in Bradford opened in earnest on Thursday, September 6, when the Presidents of the various Sections delivered their addresses, and when these were disposed of the reading of communications commenced. Section B is the department which particularly interests *C. & D.* readers, because it is there that chemists congregate, and this year they were presided over by Professor W. H. Perkin, jun., Ph.D., F.R.S. His address was on

### THE TEACHING OF CHEMISTRY.

One part of it referred to education and examination, and we reserve it for later comment. Here we give the broadest indication of the nature of the address. The teaching of the science in elementary schools was the first part, and on this point Professor Perkin showed that the City of London School has the credit of being first in the field—viz., in 1847, when Mr. Hall was appointed teacher. Other schools followed this example, but laboratory practice appears not to have been given in these early days, the Manchester Grammar School being first in that respect, which was in 1868. Even the Science and Art Department did not exact practical knowledge until 1878, when the advanced candidates were admitted to a practical examination, and four years later it was added to the elementary stage. So far as the elementary schools are concerned, the teaching of chemistry was not regarded as an educational force until a committee of the Association reported to the Newcastle meeting in 1889 that it was worth while to teach chemistry in schools, not so much for the usefulness of the information it imparted as for the special mental discipline it affords if the scientific method of investigating nature be employed. It was argued that "learners should be put in the attitude of discoverers, and led to make observations, experiments, and inferences for themselves," and since there can be little progress without measurement, it was pointed out that the experimental work would necessarily be largely of a quantitative character. That is now the direction which the teaching is taking, and Professor Perkin told the Section some of the benefits which have resulted from it. There is still a weak point, and it deals with the education of the student who wishes to become a chemist. Although the science has been advancing for many years, the course of training which the student goes through during his first two years at most colleges is still practically the same as it was thirty or forty years ago. After preparing a few of the principal gases, the student devotes the bulk of his first year to qualitative analysis in the dry and wet ways, and his second year to quantitative analysis. Professor Perkin does not think that this is the best training. He then gave a sketch of chemistry teaching during this century. Here he did not do justice to Klaproth, one of the most fruitful contributors to the foundation of modern analytical chemistry, who, as a teacher, was not far inferior to Liebig, and he had the inestimable advantage of being a pharmacist. Nor was Professor Perkin correct in saying that the "introduction of lectures illustrated by experiments was mainly due to Davy." In Edinburgh Black "illustrated his lectures by a great variety of examples in the way of experiments," and there is no reason to suppose that he did not do so from the beginning of his professoriate (1766); for while an undergraduate at Glasgow (1746-48) he assisted Cullen in all his operations, and his experiments were frequently adduced in Cullen's lectures as good authority. Even Thomson must have been before Davy, for he was a pupil of Black's, and himself began to teach in Edinburgh in 1800, a year before Davy went to the Royal Institution. To Thomson is given the credit by Professor Perkin of having opened the earliest laboratory for general instruction in Great Britain, but he adds: "The provision of suitable laboratories for the study of chemistry seems to date from the year 1845, when the College of Chemistry was founded in London—an institution which under A. W. Hofmann's guidance rapidly rose to such a prominent position." This leaves a big gap, which is, at least, partly filled by the work of A. Todd Thompson and Thomas Graham at the University College, and of Fownes at Bloomsbury Square;

but all of these pale before Liebig's instruction, which first drew British students to Giessen in the thirties. From that time the teaching of analytical methods has been in the ascendant.

The presidential address to Section C (geology) was this year again of that alluring character which calls for notice in these pages. It was on

### THE AGE OF THE EARTH,

and Professor W. J. Sollas, who gave it, juggled with millions of years as nimbly as if they had been billiard-balls. The first critical period of the earth's evolution was when the molten planet was cooling down under a pressure (5,000 lbs. to the square inch) of an atmosphere which contained all the water now on the face of the earth. It was then that a big chunk of it was thrown off to form the moon. In the second period the earth solidified, "soon after the birth of the moon," and was reduced to a temperature of 1,170° C. Then it entered upon the third period, when the ocean was formed, and exactly how long that took we seek for in the ocean itself. It contains the data, and Professor Joly has done the calculations. These we summarise. The water of the ocean was distilled water at first. It is now intensely saline, so that if we calculate the amount of salt in the ocean, get to know how much the fresh-water rivers carry into it every year, and reckon up, we arrive at the age of the earth from the time that the sea was aqua destillata. Now, according to Sir John Murray, the discharge of rivers into the sea annually is 6,524 cubic miles of water, the salinity in terms of sodium varying from 5.73 to 24.5 per million. Professor Joly took the lowest of these figures, and reckoned that 160,000,000 tons of sodium reaches the ocean every year. The ocean contains 90,000,000 times more sodium than this, *ergo* the ocean is 90,000,000 years old. Professor Sollas would take off some ten to thirty million years. We prefer to take all the years we can get, and the saline-solution data seem to be the only reliable registration details available regarding the earth's birth. We should like to know how long the first and second periods lasted, but when we inquire of such physicists as Lord Kelvin and Professor Darwin, they place the periods in which they happened anywhere between twenty and sixty million years ago; and as Professor Joly's ocean had about 30,000,000 times 160,000,000 tons of sodium in it at the earliest of these dates, we must pause until another speculator comes along. We next turn our attention to

### THE BRITISH EMPIRE.

Sir George S. Robertson had something to say about this in the Geographical Section, of which he is President:—

The Empire is equal in size to four Europes, while its population approximates four hundred millions. Outside of these islands we have some ten millions of white-skinned English-speaking fellow-subjects. "British Empire" is somewhat of a misnomer, he said. An empire really means a number of subject peoples brought together, and at first held together, by force. India is an empire, for instance. But the style British Empire has become in time of stress a rallying-cry for all the Queen's subjects. It has a clearly defined, a distinct, a national significance, just as Imperialism has a special and peculiar meaning to all of us. We understand by British Empire and by British Imperialism a confederacy of many lands under the rule of her Britannic Majesty. This confederacy is dominated by white peoples—Anglo-Saxons, Celts, French-Canadians, and others—knit together in most instances by the ties of blood-relationship, but with equal if not greater closeness by common interests, an identical civilisation, and a love of liberty, in addition to that dignified but enthusiastic acceptance of the constitutional sovereignty of the same Queen. Comparing the British Empire with other empires, ancient, recent, or now existing, its two most remarkable features are its prodigious and long-continued growth and the persistency of its power.

We have quoted that because people sometimes worry us on the subject. Another point about the Britisher is that he is

### A PRODIGIOUS BEEF-EATER.

Thirty years ago the consumption of all kinds of flesh food amounted to 100 lbs. per head per annum in the United Kingdom. To-day, Major P. G. Craigie (who was president of the Statistics Section) estimates the figure to be 132 lbs. We look upon this from the pharmaceutical point of view. Thirty years is not a sufficiently long time



for the human organisation to adapt itself to so enormous an increase in the least digestible part of diet, therefore the increased demand for digestive aids and for stomachic physic generally is directly connected with the increased consumption of butchers' meat.

#### A CENTURY OF BOTANY

was presented by Professor Sydney H. Vines to the Botanical Section. In the days of Linæus 10,000 plants were known; to-day 175,596; but Saccardo puts the figure at 400,000. Classification is the product of this century, while the morphology, anatomy and histology, and physiology of plants are almost entirely the product of the nineteenth century. Every department of the science has so grown in the meantime, and has been so greatly specialised, that botany can no longer be regarded as a single science: it has branched into a congeries of sciences.

In the Botanical Section on September 7 Dr. F. F. Blackman read a paper prepared by himself and Miss Matthæi on the effect of the

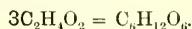
#### CLOSURE OF STOMATA

on assimilation. The stomata of most leaves possess the power of closing when the leaf is exposed to dry air. The plant thus protects itself from injurious loss of water-vapour. It becomes interesting to determine what effect this closure has upon the assimilation performed by green cells in light, upon which process the whole nutrition of the plant depends. All the carbon dioxide from the air which the leaf uses up in assimilation passes into it through the stomatal openings. Should dry air cause these openings to shut, then assimilation from lack of carbon dioxide would fall into complete abeyance. By exact experimental determinations this is found in be the case, and by artificially drying the air assimilation can be entirely prevented. In the antagonism between the tendency to close produced by the dryness and the tendency to open produced by light the former gains the upper hand, and it pays the plant to starve for the time rather than to be dried up.

After this Mr. Heury Jackson contributed a note, which is the practical outcome of the investigation by Mr. Fenton and himself on

#### GLYCOLLIC ALDEHYDE.

This aldehyde under the influence of dilute alkalis very quickly condenses to two synthetic hexoses, one of which is identical with fructose, thus:—



The question arose, would green plants build up starch from the aldehyde. Leaves of *Tropæolum* and clover, which had been depleted of their starch by growing in the dark, were floated in a 3-per-cent. aqueous solution of diose, control experiments being made with cane-sugar, glycerin, and distilled water; the whole series being kept in the dark for six days. They were then tested, and it was found that those floating in pure water were quite starchless, those in glycerin almost so, but those growing in diose had accumulated starch in the tissues.

In the Section of Zoology on the same day Major Ross delivered a lecture on

#### MALARIA AND MOSQUITOS.

There was nothing particularly fresh in the discourse, but in concluding the lecture he informed his audience that the female of *Anopheles* alone is the biter. While *Culex* can be detected by its humming, *Anopheles* is silent, and it is possible to be bitten without knowing it at the moment. He has found that a blood diet is always necessary to the maturing of the eggs. He has kept many thousands of mosquitos under observation, and has never known one to lay eggs except after a meal of blood. Malarial infection is derived chiefly from the native children, who swarm everywhere, and whose blood is full of the infecting parasites.

#### WELL-WORN SUBJECTS

turn up in the Chemistry Section on Monday of this week, when Mr. W. J. Pope and Dr. Lapworth made communications upon matters which they have frequently brought before the Chemical Society. Mr. Pope's paper was on the stereochemical investigations which he has made upon the tin and sulphur compounds of carbon, and it was agreed in

the discussion which followed that these researches by himself and Mr. Peachey were doing much to elucidate the difficult questions of valency. Dr. Lapworth's paper was on the constitution of camphor, and it was followed by memoirs on the same subject by Professor Aschan and Dr. Bredt. The latter had been invited to attend, as it was expected that the question might be finally settled. Dr. Bredt was unable to attend, but sent a copy of a paper he is to read elsewhere, entitled "The Degradation of Camphor."

Professor Armstrong said for the last twenty-five years camphor had occupied the chemical field, and if the formula of camphor had now been settled, the achievement was a great one. Chemists in this country had contributed a considerable share towards the elucidation. The President, Dr. Kipping, and Mr. Pope followed, and much appreciation was shown of Dr. Lapworth's contribution. Other papers of a highly technical nature were contributed to this section on the same day.

#### HOW COAL IS FORMED.

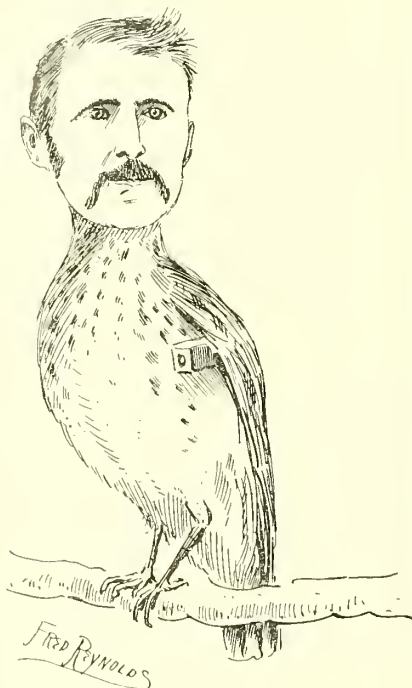
Mr. A. C. Seward, F.R.S., who for some time was a member of the Pharmaceutical Board of Examiners for England and Wales, is one of the leading fossil botanists, and has devoted a large amount of time to the problems underlying the formation of coal in the past ages. In a paper on the botanical evidence bearing upon the conditions under which coal was formed, he summarised the probabilities, and stated that if ordinary coal is microscopically examined it is found to contain spores—in abundance in cannel coal—fragments of tissues, bacteria, and the ground substance of coal. Boulders and coal-balls are also included in the seams. Hence he thought that the seams are not the result of growth in one place, nor of drifting, but of the accumulation of vegetable *débris* derived chiefly from plants growing on the surface of large lakes and pools near to the borders, where they died and were carried out by gently flowing water and sank to the bottom over the whole water area. The same subject was discussed by Mr. J. E. Marr, F.R.S., who gave it as his opinion that the study of the chemical composition of fireclay and other components of coal, in addition to the study of coal itself, is necessary to advance our knowledge. Dr. Horace Brown, F.R.S., who is best known for his work on yeast, also joined in the discussion, stating that a much larger percentage of carbonic-acid gas is supposed to have existed in the atmosphere at the time that coal was formed. Experiments that he has made at Kew seem to point to the fact that the amount of carbonic acid gas in the atmosphere during the carboniferous period was not much more than exists at present, and his experiments have proved that a larger percentage than the present normal suppresses the flowering of the plants. The discussion was continued by many others after Dr. Brown, and it distinctly left the impression that the origin of coal is still obscure.

#### THE EFFECTS OF COPPER ON THE HUMAN BODY.

Dr. Thomas Whiteside Hime, in a paper to Section B, strongly condemned the periodical outcry that copper—"greened" vegetables are injurious to health. He says the alleged "poisonings" by food cooked in copper vessels have undoubtedly been mostly, if not all, due to ptomaine-poisoning. Copper has been in use from prehistoric times, and its dangers, if they existed, must have been known to the ancient and modern world. Yet the ancients are absolutely silent on the subject, and among moderns only a few, almost entirely analysts, declaim to an incredulous public as to dangers which have not been realised. The alleged fraud in so-called "greening" of vegetables is purely imaginary. The copper does not "green" old peas or make them look young. Old yellow peas when "coppered" still look old and yellow. The quantity of the copper compound present in the amount of artificially treated vegetables which is occasionally eaten at a meal is only a fraction of the corresponding amount of copper sulphate which physicians prescribe to be taken three times a day for weeks and months continuously. Therefore there is no sufficient ground for the prohibition of the sale of "coppered" vegetables, any more than of the innumerable kinds of fruits, vegetables, shellfish, cereals, mineral waters, wines, and animal flesh which naturally contain the metal in some form.

The scientific proceedings terminated on Wednesday.

## The Pharmaceutical Aviary.



The Dalkey Bird.

Although its name acoustically recalls the dicky bird (which hitherto has eluded the artist's eye), this specimen has no connection with it. It has occasionally been seen in the Bloomsbury cage, but, being a bird of passage, does not stay long. It is the leader of the Milesian birds, and is distinguished by its bright blue eye, which has a sparkle in it like the water of Wells. It is a persistent shooter, and is often seen with its little gun under the left wing. Unwary young birds who bill and coo, and old cocks who look wise, are sometimes hit. It is a cheerful bird, and the most musical in the aviary. Very fond of the big drum and the trombone, also of whistling as it thinks. Beggs all the crafty birds to gather together at St. Stephen's Green next year, and promises to give them quite a flutter.

## For Students to Think About.

[A pharmaceutical teacher who has read the *C. & D. Educational* number favours us with his musings thereon, chief of which are in the subjoined paragraphs.]

IN the official list of recognised examinations in place of the Preliminary, there is no mention of the Birmingham University Matriculation. As it is on a par, or nearly so, with that of London University, it is certain to have a claim for official recognition.

A curious fact may be recorded—that the certificate of a young man who had passed in all the required subjects and more, except English (it was not taught at his school, and that a high one), was compelled to go through all the work again in order to satisfy the Board that he was a fit and proper person to enter pharmacy. Curiously enough, this English proves a stumbling-block to many a pharmacist.

In conversation with several pharmacists on the division of the Minor examination, it was gathered that it would be good, "for it is certain then to be stiffer, and there are already enough of us, goodness knows." Another said, "Why all this fuss? An unqualified man suits me better than a qualified one, and is more anxious to please me and my customers because of his status in pharmacy's world." A third told our correspondent his assistant had "converted his bedroom into a chemical-laboratory, and has his mind more on experiments than his shop-work, and thus having two masters, cannot serve either satisfactorily."

Dimensions of plants and their parts form an important diagnostic characteristic of them when botany-books are consulted, and examiners in *materia medica* are often fond of showing candidates abnormally large or small specimens of official things. A student of pharmacy has exhibited with much pride a leaf of our old familiar friend *Taraxacum dens-leonis* measuring 2 feet 4 inches in length, and a *Hyoscyamus* leaf 20 inches long which he had collected. Can you readers go one or more better in this matter?

What is the meaning of the word "bast" as applied, I believe, to the peculiar tissue of the bark and other parts of plants?

An excellent illustration of the value of a little knowledge in recognition of drugs is here recorded. A dispensing chemist purchased a 7-lb bag of guaiacum-chips; the fineness of the sample induced his assistant to add a few pieces to his collection, and when studying for his Minor showed it to his teacher, and expected "What a fine specimen!" So it was, but it happened to be, this time, what is known as *lignum quassiae*.

## Trade Still Flourishing.

THE Board of Trade returns for August again display a remarkable vitality in the trade of this country. During the month there was an increase of 2,726,000*l.* in exports, and of 1,403,000*l.* in imports, while in the eight months exports advanced by 21,935,000*l.* and imports by 20,639,000*l.* The imports of chemicals, dye-stuffs, and tanning substances decreased by 35,500*l.* last month, making the total decrease for this year 261,600*l.*; but we continue to export more chemicals and medicinal preparations, the August increase being 12,500*l.*, and for the eight months 423,769*l.*, the total value being 6,444,633*l.*, against 6,017,900*l.* for the corresponding period of 1899. August is a bad business month, so the reduced exports of alkali are not alarming. During this year we have shipped to the United States 575,300 cwt. of alkali, or 220,200 cwt. more than in 1899. The export of bleaching-materials was 84,739 cwt. in August, compared with 104,122 cwt. in August, 1899; but there is a net increase of 14,845 cwt. for the eight months. Values have also risen, being 771,311*l.*, against 649,269*l.* last year. Sulphate of copper improved in August by 191 tons, or 1,919 tons for the eight months. The exports in tons were:—

|                      | 1898   | 1899   | 1900   |
|----------------------|--------|--------|--------|
| August ... ..        | 482    | 221    | 412    |
| January to August... | 49,338 | 36,596 | 38,515 |

The trade in chemical manures is still declining, the German purchases showing a falling-off of 5,410 tons for the month. Values for the eight months are 1,626,867*l.*, which indicate that prices have risen considerably. The increased exports of British drugs and medicines continue to afford testimony of their purity and efficacy; the figures are as under:—

|                      | 1898    | 1899    | 1900    |
|----------------------|---------|---------|---------|
|                      | £       | £       | £       |
| August ... ..        | 94,161  | 93,056  | 109,421 |
| January to August... | 710,613 | 762,080 | 832,268 |

As regards imports, Peruvian bark shrunk by 1,354 cwt. last month, but there has been an increase of 6,768 cwt. on the eight months; the exports increased by 1,654 cwt. The imports of quicksilver continue low. From January to August we have only imported 398,218 lbs., against 3,795,164 lbs. for the same period of 1899. The exports last month were also slightly less, and for the eight months of this year they exhibit a heavy decrease of 365,583 lbs., being 1,108,888 lbs. against 1,474,471 for the corresponding period of 1899.



## Observations and Reflections.

By XRAYSER.

THE STUDENTS' NUMBER OF THE CHEMIST AND DRUGGIST turns our thoughts almost with a wrench into the winter-session—that is, the educational and examinational—channel. I confess I am not quite comfortable in that galley. I am among those who think that examinations are the curse of our age; that their vaunted effect of directing the energies of a student on profitable lines is as nothing by the side of their stultifying influence on minds of no one knows how much capacity, and of their utterly misleading representations of qualification. I have said before in these notes that if Shakespeare had been required to spend four or five of the best years of his youth in "preparing for examinations," he would never have written "Macbeth." Very few, indeed, of the men who have done the greatest things in the world have been examined men; or, if they have been, their work has not been on the lines of the studies in which they were pronounced competent. They have, in fact, succeeded in spite of their examinations. And then who believes, practically, in examinations? Mrs. X sends for Dr. Y because she knows he treated Mrs. Z's baby so well, not because he took the silver medal in his anatomy class.

BUT SENTIMENTAL SYMPATHY with the ordinary run of students is not implied by the preceding paragraph. Students are not responsible for the examination system, therefore I have no quarrel with them generally. But I think they are made too much of. Many of them are good, honest, hard-working young fellows who study because they have to do so, but whose desire is to get through the whole bother with as little expenditure of time and money as possible, so as to get to the work of their lives. But the florid orators and scribes, who get their opportunities just at this season, do their best to deteriorate this healthy condition by inculcating a "love of study for study's sake," "the duty of research," and platitudes of that character. There is no disgrace in loving study, nor in research, nor in being a bookworm. Some people, happily, are constituted that way; it is their *métier*. What the professors have got to learn is that, in the scheme of humanity, there are fifty thousand different kinds of work to do, and that, astonishing to relate, fifty thousand differently constituted beings will turn up to do the work with or without the assistance of the professors.

CELLS, AND NUCLEI, AND CYTOBLASTEMA, for example, attract some minds and repel others. I know some scientific revellers who claim to have found a delirious joy in Sir William Turner's address to the British Association. The study may be an attractive one when you get far enough advanced in it, but the entrance to it is well guarded against the ordinary excursionist in the fields of science. Karyokinesis, which I understand to be the process by which cells multiply themselves by dividing their nuclei (though I may claim that this lucid explanation of the term is mine, not Sir William Turner's), must be a regular *pons asinorum* of biology. "The changes within the nucleus," said the President, "are of so complex a character that it is impossible to follow them in detail without the use of appropriate illustrations." Then why not give some appropriate illustrations? If Sir William could only have had the courage to illustrate his address by a series of lantern-views of enlarged photographs of those cells and their nuclei! The greybeards on the platform around him would have fainted perhaps, but the audience in front of him would have under-

stood a little better what he was talking about. Such an innovation may come some day, but for the present science is safe in its dignity and obscurity.

AN ELEMENTARY SKETCH of the process of karyokinesis, he said, was all he could give in the absence of the illustrations. And this is a specimen of the President's easy way of expounding the elements of the branch of study of which he is so famous a master. He was describing how the nucleus develops fine threads or fibres, which arrange themselves in loops and form a compact coil within the nucleus, which ultimately becomes a star-like figure. Then, he said, "the loops of the chromatic star arrange themselves in the equatorial plane of the spindle, and, bending round, turn their closed ends towards the periphery of the nucleus and the cell." How easily that might have been made clear by a picture, and how difficult it is to grasp when only set forth in words!

THE SICK STUDENT who has so stirred the hearts of Scotch pharmacists has accomplished the more difficult feat of disturbing that keen apprehension of logic for which the nation is justly famous. I gather from the statement made by the *C. & D.* Scotch correspondent that in the second case which came before them the Scotch examiners deliberately defied the decision of the Council in the first case. Apart from the merits of the dispute, I do not see how the affairs of the Society can be carried on properly unless there is some central authority to be obeyed, and that authority, it will be conceded, must be the Council. Karyokinesis, the separation of the one cell into two, will be better than a perpetual state of discontent and rebellion. The same correspondent also intimates that a definite promise was made by a leading member of the Council that the Scotch view should be adopted. The petition did not say this at all. It only referred to a "consensus of expectation." Mr. Claude Henry and "Sunrays" seem to regard the argument that the sick student should pay his due share of the examination-expenses as harsh and unreasonable, and "Thistle-down," with that fine, manly outspokenness which so often distinguishes the anonymous correspondent, describes it as "sickening twaddle." But these gentlemen, in their generosity to sick people, forget to be fair to well people. The organisation being established, and a going concern, "one candidate more or less makes an infinitesimal difference," says "Sunrays." On the same principle I might ask the publisher of this journal to let me have an advertisement at half-price. When you are printing the lot one more will only make an infinitesimal difference, I might say; and if I pressed my appeal on the ground that I was suffering from a sick-headache the analogy would be complete.

THE CAMPHORATED - OIL CASE reported last week does not seem to be quite the right one to take to the High Court. The North London Magistrate said he would grant a case on the question whether the British Pharmacopœia is a standard. If the question so formulated could be put to the High Court irrespective of any particular article there cannot be much doubt that the answer would be in the negative. In the strictly legal acceptance of the term the B.P. is not a standard. It is important evidence, at all events as concerns medicines, but it is not a final standard even in regard to them. This has already been established in the case of *White v. Bywater* (which referred to tincture of opium). But the question will not come before the Court in that abstract form. The inquiry will be whether, in the particular case under review, the Magistrate was justified (in the absence, be it remembered, of any other evidence whatever) in accepting the authority of the British Pharmacopœia. If the Court says he was not, the result will be that any oil containing camphor, in no matter what proportion, may be sold as "camphorated oil." This is not a conclusion which honest chemists can desire. If, on the other hand, the Court says the Magistrate was right, that decision will prove nothing as regards other substances not sold as medicines, but which may happen to be mentioned in the Pharmacopœia.



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## Editorial Comments.

### Cheap "Patents."

It is well known to the trade that proprietary articles protected by the makers are occasionally obtainable below the fixed price charged by the agents and manufacturers. A good deal of mystery attaches to the origin of such supplies, but it is believed in wholesale circles that there are comparatively few channels through which they are obtainable, and considerable suspicion attaches to their source. We have recently had the opportunity of inquiring in regard to the matter, and several explanations are given to account for the cut rates. The first and most feasible is that the goods have been obtained from the manufacturers as part payment of advertisements to be inserted in retailers' catalogues or almanacks, or that the cheap goods are put on the market by low-class periodicals, who take payment for advertisements in goods. It is well known that the latter custom has prevailed for many years, and that there are regular outlets, especially abroad, for such goods, which are disposed of for what they will fetch. But this explanation certainly does not apply in the case of several leading proprietary medicines which have recently been sold under the makers' prices. The leading makers do no business of that kind, and pay for what they get in cash.



It is also suggested that the sellers of cheap patents buy them at auctions, and this does apply to intermittent and small offers, but does not explain the constant supplies which cutters have to offer. The third and most serious suggestion is that the goods are not obtained honestly, and of this we have confirmation in the case which was reported three weeks since. We have every reason to believe that this is not a solitary instance, and that large quantities of leading proprietary medicines are in this way offered to the trade below the makers' prices. Further that this has been going on for a long time, and that there are various channels through which proprietary articles so acquired are disposed of in this country. Makers of proprietary articles and their agents have for long had a lot of trouble with the matter, because retailers and wholesalers almost daily write to them asking why So-and-So can buy at a little below the minimum wholesale rates, and the makers cannot explain except that they strictly adhere to their rates. A full explanation may soon be forthcoming, but meanwhile we would be glad if any subscribers who have been offered or have bought leading "patents" (such as Beecham's pills, Holloway's pills, Williams's pills, Carter's pills, Seigel's syrup, and Steedman's powders) below the makers' prices would communicate with us.

### Government Chemistry.

DR. T. E. THORPE, principal chemist of the Government Laboratory, has submitted to the Lords Commissioners of her Majesty's Treasury a report of the work done by his Department during the year ending March 31, 1900. The first thing that strikes one on perusal of the report is the exceedingly large number of analyses or tests made by the chemists connected with the various departments of the Excise and Customs. The following are the figures for the year:—

|                                                                               |     |     |         |
|-------------------------------------------------------------------------------|-----|-----|---------|
| In Custom-house Laboratory                                                    | ... | ... | 9,820   |
| In Docks Testing-stations and Thames Street Laboratories (beer, spirits, &c.) | ... | ... | 167,080 |
| In Hydrometer Office                                                          | ... | ... | 2,225   |
| Clement's Inn Passage Laboratory                                              | ... | ... | 63,285  |
| Excise Chemical Stations                                                      | ... | ... | 15,196  |
| Distillations in Chemical Stations                                            | ... | ... | 141,603 |
|                                                                               |     |     | 401,209 |

Of course, the greater number of these analyses are trivial tests, yet the distillation and hydrometer-testing of worts and wines entail some skill and a fair amount of observation. The Customs have stations in Belfast, Bristol, Cardiff, Cork, Dublin, Folkestone, Glasgow, Hull, Leith, Liverpool, London and West India Docks of London, Newhaven, and Southampton, where distillations are made of beer, spirits, and wine on importation. The men who do such work are officers who have had a training in the Government Laboratory in London. There are also Excise chemical stations in Bristol, Burton, Leeds, Liverpool, Newhaven, Southampton, Glasgow, Edinburgh, Belfast, Cork, and Dublin, where the officers are equally competent to determine the amount of alcohol in beer and worts, as well as the moisture in tobacco, without referring the samples to the principal laboratory. It will thus be seen that the country is well supplied with places which may be regarded as laboratories, and would, no doubt, be called so if we were a more pretentious people than we are.

In the "Excise branch of the Government laboratory," as the place in Clement's Inn Passage is officially called, the work done last year comprised, amongst other things, the testing of 1,002 samples of wood-naphtha, representing 371,251 gals., and of these 92 samples were not approved.

Formerly a much larger number of samples of wood-naphtha were rejected, but, as Dr. Thorpe most wisely has told all concerned the method of analysis and standard recognised, methylators are much better guided now. Altogether 10,222 samples of pharmaceutical preparations were analysed for drawback during the year, and it is interesting to add to this statement that the Customs Department in the same period examined on importation 1,800 samples of "drugs, patent medicines, and toilet requisites" for spirit; 185 samples of varnishes and paints for spirit and ethers; 50 samples of perfumery and other spirit manufactures; 160 of chemicals for dutiable articles; 255 essences for perfumery, flavouring, &c.; 58 fruit-juices; 63 samples of sulphuric and similar ethers; 10 of ethyl chloride, bromide, and iodide; 12 of chloral hydrate and chloroform; and 139 samples of methyl alcohol, the last-named being analysed in order that its potability might be determined. Even soaps are analysed on importation in order to find out whether they contain cocoa-butter or spirit; and imported nicotine is giving the Customs Laboratory a good deal of work, no fewer than 803 samples having been analysed during the year to determine its strength and character. Dr. Thorpe observes that the drugs which are examined for spirit are imported chiefly from the United States of America.

Temperance drinks gave the Excise authorities a good deal of work. During the year 986 samples of herb, ginger, and botanic beers were examined, and nearly one-third of them were found to exceed the legal limit of proof spirit (2 per cent.), for 213 samples were between 2 and 3 per cent., 59 yielded between 3 and 4 per cent., 19 between 4 and 6 per cent., and 6 were over 6 per cent., one actually containing 7.3 per cent. of proof spirit—a proportion which accounts sufficiently for the popularity of these drinks on Sunday mornings. In twenty-six cases proceedings were taken, and penalties amounting to 15*l.* were inflicted—trivial punishment, but it should not be forgotten that in these Excise prosecutions the second offence is the serious matter, for then no reduction of the penalty is made. Dr. Thorpe notes a curious offence—namely, the dilution of methylated spirit, for which legal proceedings were taken against one person during the past year, and the culprit, as far as we can ascertain, paid up. Dr. Thorpe's summary of work done for other Government Departments is given more generally, which represents no fewer than 7,238 samples. Nearly half of these were miscellaneous foods analysed for the Departmental Committee on Preservatives and Colouring-matters in Foods, but the departmental work is general. Some notes of warning to the trade can be gathered from the report. For example, of 10-per-cent. carbolic soaps tendered to the Admiralty only one in three reached the required standard, and some contained as low as 6.6 per cent. of carbolic acid. Of four samples of disinfectant-powders specified to contain 16 per cent. of carbolic acid not one reached the necessary standard and two contained less than 8 per cent. This, we believe, is a very common experience in other quarters, and the matter therefore requires the close attention of persons who deal in these disinfecting-materials. For the Board of Agriculture the Laboratory was chiefly engaged upon the analysis of milk, cream, butter, margarine, and other dairy-produce. In the course of the report it is mentioned that "coal-tar yellows" are being increasingly used for colouring butter, 300 out of 1,393 samples examined containing such colouring-matter, while 399 out of the same total contained boric preservatives. The butter which comes from the United States is comparatively free from boric preservatives, and the same applies to those imported from Germany, Norway and Sweden, and Canada. Danish butters do not contain boric preservatives. France, Belgium, Holland, and Australia are the greatest sinners in this respect.

Of 132 samples of imported margarine 97 contained either cotton-seed oil or sesame oil, and 106 boric preservatives. Sesame oil is present in all margarine made in Germany, the law there compelling it. For the India Office the Laboratories did some work, the only part of which that we need refer to being a comparison of the constituents of podophyllin obtained from *Podophyllum peltatum* and from *P. Emodi*, with what result is not stated. The medicines supplied to the War Department have exhibited in general a satisfactory conformity with the stipulated quality and strength; but certain surgical dressings have been found deficient in the proportion of antiseptic they were presumed to contain. Finally, we may note that of seventy-one articles referred to the Laboratory under the Sale of Food and Drugs Act the Government chemists disagreed with the public analysts in 21 per cent. of cases against 30 per cent. in 1898-99, and 38 per cent. in 1897-93. The cases of disagreement included flour, alleged to contain alum; milk of sulphur, said to be adulterated with sulphate of lime; seidlitz powders, alleged to be deficient in bicarbonate of sodium; and ground ginger, alleged to contain exhausted ginger. This satisfactory record indicates that under Dr. Thorpe's régime his Department and public analysts are getting to understand each other better—the former is not so much inclined to pose as the infallible, and the latter are more disposed to be friendly to the Department, and to learn from it. Which is good for traders.

## New Light on an Old Drug.

SENNA is one of the oldest of the most popular medicines and one of the few which have withstood the attacks of chemists. To the therapist there is no active principle of senna; the drug is given entire or in some elegant galenical form, which is, or pretends to be, the leaf *minus* the cellular and vascular tissues. Yet there have been many investigations upon it, and the most recent, by Tschirch and Hiepe, follows up previous work with success, the results being published in the *Archiv der Pharmacie* (1900, 427). It is a comprehensive contribution to the chemistry of senna, and the most important since Stockman's research. The present authors, having noticed a yellow flocculent precipitate form in a watery extract of senna on standing, examined it by heating with sulphuric acid, and found that the body reduced Fehling's solution. Before hydrolysis it does not yield the oxymethylantraquinone reaction, but does so afterwards. On purification the body was found to have the formula  $C_{11}H_{10}O_5$ , thus differing from emodin by one carbon atom. They call it *anthraglucosennin*. The Alexandrian leaf yields it best on exhausting with weak ammonia-water in the cold, and precipitating with hydrochloric acid, the precipitate being afterwards purified, but still it is crude, for fractional extractions in a Soxhlet tube separated it into several compounds, the ether-soluble portion containing senna-emodin, senna-chrysophanic acid, and glucosennin. The emodin after complete purification melted at  $223^{\circ}$ – $224^{\circ}$  C., agreeing with aloe-emodin, but differing in this respect from frangula and rhubarb emodin, which melts at  $250^{\circ}$ – $255^{\circ}$ . This difference was confirmed by examination of the acetyl derivatives, which demonstrated that senna-emodin is identical with aloe-emodin [ $C_{15}H_{10}O_5(OH)_2$ ], bearing the same relation to it as rhubarb-emodin to frangula-emodin. It was also found that the chrysophanic acid from senna-leaves differs in melting-point ( $170^{\circ}$ – $172^{\circ}$ ) from that of rhubarb, which Hesse found to melt at  $186^{\circ}$ – $188^{\circ}$ . He explained that the lower melting-point of some acids is dependent on the presence of methyl-chrysophanic acid, but Tschirch and his colleague have been unable to find a trace of a methyl

derivative in the senna-chrysophanic acid. A third body, which they obtained by the ether extraction, was an amorphous yellow powder, which, on heating, gave a sublimate in fine red needles, melting at  $163^{\circ}$ . This body also proved to be of a glucosidal nature, and gave Bornträger's reaction (oxymethylantraquinone). Purified it melted at  $163^{\circ}$ , and its empirical formula was found to be  $C_{22}H_{18}O_8$ , which is all we know about it so far. Other two bodies were extracted with acetone—viz., senna-isoemodin and senna-rhamnetin—and there was left an indefinite, insoluble portion called "sennanigrin," which on decomposition yielded senna-emodin and chrysophanic acid. A direct extraction of the leaves with dilute alcohol, so as to avoid decomposition as much as possible, should, according to Aweng, leave the primary glucosides in the aqueous solution on concentration, whilst the secondary glucosides are deposited as a fine brown powder. The decomposition-products of the primary glucosides were separated and found to be emodin and chrysophanic acid, agreeing with those obtained when ammonia is used for the extraction. The other bodies—isoemodin and rhamnetin—were also obtained with identical properties. An examination of the indefinite cathartic acid is also recorded, but this portion of the subject requires further investigation. In order to quantitatively value senna the authors suggest an estimation of the bodies which yield oxymethylantraquinone, or, in practice, of the amount of this body obtained.

For this purpose 0.5 gramme of the finely-divided drug is heated with 50 c.c. of alcoholic potash for five minutes. After filtration the process is repeated, and the liquids mixed. The mixture is rendered acid with 20 c.c. of hydrochloric acid and shaken with 100 c.c. of ether. The ether extraction is repeated, and the mixed ethereal liquids are shaken twice with 100 c.c. of dilute ammonia, which extracts all the oxymethylantraquinone. The ammoniacal solution is made up to 500 c.c., and the amount of active substance present estimated by adjusting the thickness of the solution necessary to produce the same spectrum (quantitatively) as a solution of pure aloe-emodin of known strength. The following results were obtained:—

|                           | Per Cent. |
|---------------------------|-----------|
| Senna, Alexandrian ... .. | 1.00      |
| Tinnevely ... ..          | 0.80      |
| Tripolitana ... ..        | 0.86      |
| Mecca ... ..              | 0.97      |
| Obovata Batka ... ..      | 0.70      |
| Resin-free ... ..         | 0.64      |
| Follicule sennæ ... ..    | 1.15      |
| Cortex frangula ... ..    | 2.60      |
| Cascara sagrada ... ..    | 0.61      |
| Rhubarb ... ..            | 1.50      |
| Aloe lucida ... ..        | 0.80      |

What the communication lacks is a therapeutic sequel, but as far as it goes it throws light upon the *rationale* of galenical methods of preparing senna for administration. For example, it appears to be clear that deresinified senna is mild in its action because the alcohol deprives it of a portion of its emodin. This and other points arising from the research deserve the attention of practical pharmacists.

## COMPANY QUALIFICATION.

If any argument were needed for expedition with company-pharmacy legislation it will be found in the registration of companies week by week. Firms with the remotest possible connection with the drug-trade take the power to trade as "chemists and druggists," by adding two or three words to their memoranda of association, thus doing with a few strokes of the pen what involves the individual in years of work, besides hard cash. How long this sort of thing is to go on depends now upon our Pharmaceutical Councils, which, we regret to note, are



still as far apart as ever. If they are to seek powers in the matter as amendments to the Pharmacy Acts they must proceed independently, but some agreement on a common line of action would be advantageous, and that, judging from the Irish Council report, is not sought by Bloomsbury.

#### ADEPS LANÆ HYDROSUS VENALIS

might be an appropriate name for Bradford sewage. According to Mr. F. W. Richardson, the city analyst, in times of normal trade over 20 tons of wool-grease go every week-day into the city's sewers. That makes sewage-treatment in Bradford a most serious problem. Think of it; 20 tons of stuff that might be sold at a few pence per pound if it were extracted!

#### TRANSVAAL CONCESSIONS.

A notice has been issued by the High Commissioner for South Africa respecting concessions in the Transvaal. Her Majesty's Government will respect generally ordinary trading rights which were previously in force in that territory, but there will be inquiry into any concession conferring the sole and exclusive power of manufacture, importing, or dealing in any commodity in the Transvaal, as well as some other concessions which are scarcely within the scope of our trade. The drug-trade of the Transvaal will to some extent be affected by the decision, because during the last two or three years of Mr. Kruger's Government there were concessions in respect to the manufacture of nitro-glycerin, bottles, candles, and some other things which turned out to be rather hard upon the drug and chemical trades. Messrs. Read, Holliday & Co. (Limited), for example, had Transvaal patents for an article, but were not allowed to work them there or import the article, because Mr. Kruger had given somebody a concession.

#### GROSSKOPF THE MARTYR.

A Member loquacious, with head slightly swelled,  
Sheds immature "views" on the people;  
He would rather be silent—but when he's compelled  
He lectures the Earth from his steeple.  
He's not yet quite certain what *is* for the best,  
But the Widow he's willing to barter  
For sake of a Something which gives him no rest,  
But to which he is truly a Martyr.  
This Something (indefinite) causes him pain  
And induces "a weep and a wail-o,"  
And sets him a-searching with might and with main  
For a ready-made close fitting halo.  
He writes (and he tells us he writes very well)  
Of chiffon, and ribbons, and garters,  
And lacework and frilling; and all these things swell  
Our belief that we really are Martyrs.  
Now we think that if only he's willing to wield  
A power by his spoiling of paper,  
There stretches before him a truly wild field  
In a lecturing-course to the draper.  
His nebulous thoughts we're unable to grasp,  
But we think he should seek a fresh charter;  
And we boldly assert—till our very last gasp—  
That he'll soon make the draper a Martyr.

#### HUMPHRY DAVY'S KNIGHTHOOD.

Miss Gabrielle Festing, in a recently-published book entitled "John Hookham Frere and his Friends," states that knighthood was conferred upon Humphry Davy on account of his then approaching marriage with Mrs. Apreece, as she feared it would be regarded as a *mésalliance* on her part. Sir James Crichton Browne is indignant at this allegation, and has written to the *Times* about it, suggesting that if there was anything of the kind it was on Davy's side, as Lady Davy appears not to have had the respect for her husband that his great abilities deserved. Sir James might have added that the baronetcy conferred upon Davy six years later was unquestionably an honour to the man himself, irrespective of his wife, for it was the direct result of contact with the Prince Regent owing to experiments that Davy was making at his request.

#### "THERE'S 'AIR."

It was bound to come to us at one time or another, and Mr. Labouchere has supplied it in a letter from "Vulpera" which is printed in *Truth*. There is no man in England more fond of the Engadine than Mr. Labouchere, but we were not aware until we read his letter that he has got special views of his own in regard to the atmosphere. He says:—

Air is made in Nature's crucible of the same component parts mixed in precisely the same proportions everywhere. It is sometimes vitiated by too many people breathing it and by bad drainage in cities, and by miasmas arising from marshes and from decaying vegetation in country districts. But except that it is less dense owing to the atmospheric pressure on it being reduced in a high altitude, and that microbes do not pervade it above a certain elevation provided that there be no abnormal vitiation, air is as healthy in one place as in another. As for microbes, their presence in the air does no harm to those who are in good health, because healthy people have always an army of microbes in their veins and arteries, which act as an army of defence, and which are as slim in getting the better of intruders as are De Wet and his burghers. The Boers have—no, I have no time to interpolate a few observations on the South African war.

This is quite as good as the assertion which was made the other day that the vitiated air of railway-carriages and places of amusement does not produce a headache because of the exhalations from the lungs and skin of the occupants, but because the increased temperature and pressure act upon the organism in some way or another.

#### CARBOLIC-ACID SCHEDULING.

The discussion in the daily newspapers in regard to the scheduling of carbolic acid is subsiding. We observe that several chemists throughout the country have made exceedingly effective replies to the intemperate allegations put forward on behalf of unqualified retailers of poisons. It is unnecessary to reprint these here. Many newspapers have printed ridiculous paragraphs in regard to the matter, but for pure ignorance we think the following paragraph in a London letter of the *Manchester Guardian* beats everything:—

Hear that the attempt which is being made to prevent the scheduling of acids as poisons and thus compelling their sale only by skilled persons has provoked a striking commercial resistance. Of course this attempt is the sequel to the injunction which has just been issued ordering their inclusion. The National Union of Mineral-water Manufacturers, which represents a numerous body of manufacturers in England and Wales, who are, of course, the largest organised consumers of carbolic acid, has petitioned the Home Office begging that the official intention may be persisted in. In this petition it is declared that the inclusion will operate to the advantage of the community. What is more, the Union asks that all poisons should, by compulsion, be sold, in special bottles with special labels. This, it is held, would lead to easy identification and make deaths by misadventure almost impossible.

This mixing up of liquefied carbonic-acid gas and carbolic acid is exactly on a par with much of the wisdom which has dictated newspaper protests against the only step that could possibly be taken to stop what had become a national curse. The Secretary of the Pharmaceutical Society has been interviewed with regard to the incidence of the new regulation upon wholesale dealers, and it is stated on his authority that it will not affect the sale to Vestries of liquid disinfectants containing more than 3 per cent. of carbolic acid and its homologues. We regret to note that the first one to be censured for not labelling carbolic acid "Poison" is a registered chemist and druggist at Macclesfield. He is stated to be in a small way of business, and we observe from the register that his name is there in virtue of his having been in business before August 1, 1838, so that he is not an examined retailer.

GINSENG, chiefly from Korea and the United States, to the extent of 429 cwt., valued at 18,480/., was imported into Ningpo, China, during 1899.

## Pharmaceutical Chemistry of the New German Pharmacopœia.

By H. HELBIG, F.C.S., and F. W. PASSMORE, Ph.D.

### IV.

*Galbanum*.—Dietrich's modified umbelliferone test as mentioned under *Ammoniacum*, is adopted for the identification of galbanum :—

If finely-powdered galbanum is boiled for fifteen minutes with fuming hydrochloric acid, filtered, and the clear liquid carefully supersaturated with ammonia, the mixture exhibits a blue fluorescence by reflected light.

Not more than 50 per cent. of the gum-resin shall be insoluble in boiling alcohol, nor should it yield more than 10 per cent. of ash.

*Gelatina Alba* shall not yield more than 2 per cent. ash on incineration, and 1 part dissolved in 100 parts hot water shall give a clear or opalescent solution of neutral reaction, which solidifies to a jelly on cooling.

*Glycerin*.—The ammoniacal-silver test of the last edition, concerning which much dispute arose as to the meaning of the words "heating to boiling," has been modified as follows :—

If a mixture of 1 gramme glycerin and 1 c.c. liq. ammoniac be warmed in a water-bath to 60° C., then 3 drops silver nitrate be immediately added, no coloration or brownish-black separation shall take place in the mixture within five minutes.

The test, therefore, now differs from the corresponding test of the B.P. in being carried out at 60° C., instead of at the normal temperature, and a time-limit being fixed, which is important.

*Gossypium Depuratum*.—The new edition provides that the aqueous extract, made with 10 parts of boiling water, shall not give more than an opalescence with silver nitrate, barium nitrate, or ammonium-oxalate solution. Further, "in 10 parts of the extract to which a few drops of sulphuric acid and 3 drops potassium-permanganate solution are added, the red coloration shall not disappear within a few minutes." The limit of ash is fixed at 0.3 per cent. (B.P. 1 per cent.), as in the previous edition.

*Gummi Arabicum*.—A limit of 5 per cent. of ash is allowed, as compared with 4 per cent. in the B.P.

*Gutti*.—The maximum limit of ash in cambogia is fixed at 1 per cent. In the B.P., 3 per cent. is allowed. As a distinctive test it is pointed out that the emulsion of gamboge in 2 parts of water gives a clear, fiery-red solution on addition of 1 part liq. ammoniac, but the gum-resin is again precipitated in yellow flocks on neutralisation of the ammonia.

*Hydrargyrum Salicylicum*.—This mercurial salt, which appears in the new edition, shall contain at least 59 parts of mercury. In water and in alcohol the salt is almost insoluble, but is soluble in cold sodium-hydroxide or sodium-carbonate solution, as well as in hot saturated sodium-chloride solution. Advantage is taken of the latter character in the method given for the quantitative determination of the metal :—

0.3 gramme mercury salicylate is mixed with 3 grammes sodium chloride and dissolved in 100 c.c. boiling water; the solution is diluted to 400 c.c. This solution, after acidulation with a little hydrochloric acid, should, on introduction of sulphuretted hydrogen, yield 0.2 gramme sulphide of mercury.

*Hydrastininum Hydrochloricum* is another new addition to the German Pharmacopœia. The yellowish-white crystals of this alkaloidal salt melt "approximately at 210° C." The aqueous solution (1 in 20), which exhibits a blue fluorescence, gives yellow crystalline precipitates with both potassium bichromate and platinum chloride; the chromate precipitate disappears at once on warming, the platinum-compound only dissolves on heating with three volumes of water; both precipitates reappear on cooling. The aqueous solution is not precipitated by ammonia, and the yellow precipitate produced by bromine-water is redissolved by ammonia. The purity of the alkaloid and absence of foreign bases are ascertained by the following test :—

If 4 or 5 drops sodium-hydroxide solution be added to a solution of 0.1 gramme hydrastininum hydrochloride, a white turbidity shall

appear, which, however, completely disappears on shaking. On longer shaking of this solution, or by stirring with a glass rod, pure white crystals shall separate, leaving the supernatant liquid completely clear, and only of a faint yellow colour.

Hydrastinine must not be confused with hydrastine, one of the alkaloids of the rhizomes of *Hydrastis canadensis*. Hydrastinine is prepared from hydrastine by treatment of the latter with oxidising agents, which dissociate the natural alkaloid into hydrastinine and opianic acid.

*Homatropinum Hydrobromicum*.—The confusion which still exists with regard to the distinctive characters of the tropeine alkaloids is likely to be enhanced by the contradictory colour-tests given in the British and German Pharmacopœias. The B.P. distinguishes between atropine and homatropine by the behaviour of the residue obtained by evaporation of the alkaloid with fuming nitric acid towards alcoholic solution of potassium hydroxide: atropine gives "a fugitive reddish-violet coloration," whilst with homatropine "no reddish-violet coloration is developed (distinction from atropine), the residue becoming reddish-yellow." According to the German Pharmacopœia, both alkaloids behave alike in giving with the above reagents a violet coloration, the fugacity of which is characteristic of homatropine, as will be seen by the comparison of the two following tests :—

| Atropine Sulphate                                                                                                                                                                                                                                                             | Homatropine Hydrobromide                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0.01 gramme atropine sulphate, moistened with 5 drops fuming nitric acid and evaporated to dryness in a porcelain dish on the water-bath, yields a faintly yellow-coloured residue, which, on cooling and pouring over it alcoholic-potash solution, assumes a violet colour. | 0.01 gramme homatropine hydrobromide, moistened with 5 drops fuming nitric acid and evaporated to dryness in a porcelain dish on the water-bath, yields a faintly yellow-coloured residue, which, on cooling and pouring over it alcoholic-potash solution, assumes a fugitive violet colour, rapidly passing into reddish yellow. |

Thus, in the British Pharmacopœia a fugitive reddish-violet colour is said to be characteristic of atropine and distinctive from homatropine, whilst in the German Pharmacopœia the fugitive violet colour is said to be characteristic of homatropine and distinctive from atropine. With regard to the other solanaceous alkaloids, hyoscyamine is not recognised, whilst the hyoscinum hydrobromicum of the last edition appears as scopolaminum hydrobromicum in the new edition of the German Pharmacopœia.

*Kamala* should not leave more than 6 per cent. ash on incineration.

*Kreosotum*.—The same physical characters are given as in the B.P., with the exception that no reference is made to polarimetric rotation. Besides the collodion-test of the B.P., the absence of phenol is indicated by the following glycerin-test :—"Creosote is nearly insoluble in three volumes of a mixture of 3 parts glycerin with 1 part water"; and the presence of a due proportion of phenoloid bodies is provided for by the following tests :—

One c.c. creosote shall give with 2.5 c.c. sodium-hydroxide solution a clear bright-yellow solution, which shall not become turbid on dilution with 50 c.c. water.

One volume creosote mixed with ten volumes of potassium-hydroxide solution made with absolute alcohol (1 to 5) shall solidify after some time to a crystalline mass.

If 1 c.c. creosote be shaken with 2 c.c. petroleum ether and 2 c.c. baryta-water, neither the petroleum-ether solution shall acquire a blue or dirty colour, nor the aqueous liquid a red colour.

*Methylsulphonum*.—Trional, which is now introduced into the German Pharmacopœia under the above title, is distinguished from its lower homologue, sulphonol, by its lower melting-point (76° C.).

A NEW OTTO.—A firm of natives in Calcutta advertise for sale "Bulgaria Otto of Roses our Opoanax." The Madras firm interested in the cultivation of roses in the Wynaad should make a note of the above attractive designation for the otto it hopes to produce by-and-by.



# Ferri Sulphas Ersiccatus.

By R. C. COWLEY and J. P. CATFORD.

THE lowering of the standard of purity of this preparation from the 97½ per cent. of the 1885 to 92½ per cent. in the 1898 B.P. appears to have been made in deference to the general occurrence of lower percentages in published results of tested commercial samples (*vide* Dr. Attfield's "Report for 1898").

Having done some work on this subject, the results obtained induce us to believe that the official directions are responsible to some extent for the failure to maintain the higher standard.

The temperature ordered is unnecessarily low, in fact it is not possible to completely expel six molecules of water at 100° C.; and although a water-bath is not directly mentioned, yet the degree fixed on is calculated to mislead operators into using it, or steam; in so doing, of course, not even that temperature is reached by the salt.

We also find that when evaporation ceases oxidation soon commences. As the seventh molecule is not expelled under at least 280° C., there is no risk in using a temperature of 120° or 140° C. by means of a sand-bath, thus shortening the operation and minimising oxidation.

A quantity of ferrous sulphate (Kipp residue) was purified by granulation in alcohol. It assayed 100 per cent. (FeSO<sub>4</sub>·7H<sub>2</sub>O).

100 grammes of this dried on sand-bath for one hour assayed 98.6 per cent. FeSO<sub>4</sub>·H<sub>2</sub>O; then reduced to fine powder and again heated, assayed 99½ per cent. FeSO<sub>4</sub>·H<sub>2</sub>O.

10 grammes fer. sulph. gran. in a dish floating on brine at 105° C. for two hours, gave 96.9 per cent. after another two hours at same temperature gave 97.75 per cent.; transferred to sand-bath for a short time contained only 97 per cent., showing that prolonged exposure had started oxidation.

Common "green copperas" containing 97.3 per cent. (7 hydrate), heated on sand-bath for one hour, gave 95.2 per cent. (monohydrate). In another hour 94.4 per cent. only.

As 3 per cent. fixed impurity in the crystals becomes 5 per cent. in the dried, a minimum of 98 per cent. monohydrate would exclude the use of inferior raw material. Present B.P. requirement may be met by using common copperas.

Of two commercial samples of the dried salt examined, one, quite white, contained 87.55 per cent. and redried on sand-bath assayed 99.45 per cent., showing that it was a very pure salt imperfectly dried. The other sample, greyish, contained basic salt requiring additional acid for complete solution, and reacting strongly with sulphocyanate. This contained 93.5 per cent. FeSO<sub>4</sub>·H<sub>2</sub>O. Redrying only increased it to 94.35.

The Pharmacopœia directing it to be made from nearly pure crystals gives no tests in the monograph for such impurities as are liable to occur in common or inferior quality, but this does not excuse purchasers of the ready-made article from applying those given for the crystals. Finally, those who make it themselves will find that nothing is gained by prolonging the operation, except undesirable oxygen. It is true that the liquefaction that occurs above 70° C. may be avoided by preliminary exposure to a warm, drying atmosphere, but why take days when the whole can be completed in about an hour, as it can at a temperature of 120° or 130° C., stirring frequently instead of "occasionally," and finally heating it a few minutes after it has been reduced to fine powder, in a mortar if necessary?

## Gregory's Powder.

By T. F. HARVEY, Pharmaceutical Chemist.

IN THE CHEMIST AND DRUGGIST of September 1 a leading article is devoted to the report for 1899 of the senior analyst for Cape Colony, especially on his remarks concerning the stability of Gregory's powder and calcined magnesia. The quotation taken from the report is somewhat severely worded, and quite at variance with the experience of chemists and others in this country. Whatever influence the dry South African atmosphere may or may not exert upon these substances when freely exposed to it, there can be no doubt that in moister climates both water and carbon dioxide are more or less slowly absorbed.

Describing the properties of magnesium oxide, Fresenius ("Quant. Analysis," i.) remarks: "Exposed to the air it slowly absorbs carbonic acid and water." I have myself found in calcined magnesia which has been exposed for indefinite periods CO<sub>2</sub> corresponding to 10.7 and 10.2 per cent. of (MgCO<sub>3</sub>)<sub>3</sub>·Mg2HO·4H<sub>2</sub>O.

It is the everyday experience of makers of calcined magnesia that on exposure water and carbon dioxide are taken up, and they will not guarantee the preparation as free from CO<sub>2</sub> unless supplied in airtight containers. The Washington Chemical Company stated in THE CHEMIST AND DRUGGIST of October 8, 1898, that calcined magnesia on exposure absorbs both water and carbonic acid, the water always in excess. Paul and Cownley found (*Ph. Journ.*, October 8, 1898) that magnesium oxide, freshly calcined, absorbed water and carbon dioxide somewhat slowly, the CO<sub>2</sub> corresponding to 5.7 per cent. of B.P. carbonate in four days, but more rapidly if the sample was old and hydrated. This magnesium oxide, already containing CO<sub>2</sub> = 9.8 per cent. B.P. carbonate, absorbed in five days a further quantity of CO<sub>2</sub> = 14.4 per cent. B.P. carbonate; giving a total of 24.2 per cent. B.P. carbonate.

When magnesium oxide is mixed with rhubarb and ginger some of the water contained in the vegetable powders will combine with the MgO to form hydroxide, and conditions favourable to the absorption of water and carbon dioxide from the air will thus be produced. This supposition is borne out by the following analyses made some time ago on Gregory's powder of known composition:—

|                                        |                   |
|----------------------------------------|-------------------|
| Ash of the rhubarb used                | = 7.30 per cent.  |
| Ash of the ginger used                 | = 6.00 per cent.  |
| CO <sub>2</sub> in the magnosium used  | = 1.81 per cent.  |
| H <sub>2</sub> O in the magnosium used | = 2.19 per cent.  |
| Ash (MgO) in the magnosium used        | = 96.00 per cent. |
| Thus 22.22 parts rhubarb contained     | 1.622 of ash.     |
| 11.11 parts ginger contained           | .666 of ash.      |
| 66.66 parts magnesia contained         | 63.993 of ash.    |

Total ash of the mixture 66.281

|                                                                                          | Composition calculated from ingredients used | Composition after mixing and standing 7 days in full-stoppered bottle | Ditto, after another 7 days in stoppered bottle, ¾ full and opened 3 or 4 times to remove some | Ditto, spread out on paper for 3 days in balance-room. 2 days dry, 1 wet | Ditto, spread out 24 days more in very moist atmosphere |
|------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------|
| Rhubarb and ginger ... ..                                                                | 33.330                                       | 33.240                                                                | 32.986                                                                                         | 29.716                                                                   | 29.316                                                  |
| MgO ... ..                                                                               | 63.983                                       | 63.820                                                                | 63.334                                                                                         | 57.055                                                                   | 53.288                                                  |
| CO <sub>2</sub> ... ..                                                                   | 1.206                                        | 1.210                                                                 | 1.200                                                                                          | 5.507                                                                    | 6.224                                                   |
| H <sub>2</sub> O exclusive of that contained in the rhubarb and ginger by difference ... | 1.459                                        | 1.730                                                                 | 2.430                                                                                          | 7.721                                                                    | 8.172                                                   |
|                                                                                          | 99.983                                       | 100.000                                                               | 100.000                                                                                        | 100.000                                                                  | 100.000                                                 |
| Total ash ... ..                                                                         | 66.281                                       | 66.1                                                                  | 65.6                                                                                           | 53.1                                                                     | 53.3                                                    |
| CO <sub>2</sub> expressed as (MgCO <sub>3</sub> ) <sub>3</sub> ·Mg2HO·4H <sub>2</sub> O  | 3.490                                        | 3.591                                                                 | 3.472                                                                                          | 15.933                                                                   | 18.102                                                  |

Knowing the natural ash, &c., of the ingredients, and the proportion of each used, determinations of total ash and CO<sub>2</sub> (by absorption with soda-lime, using Fresenius's arrangement) sufficed in each case for calculating the above figures. It thus appears that

(1) Gregory's powder absorbs water and carbon dioxide more rapidly than calcined magnesia.

(2) Water is absorbed at first more rapidly than carbon dioxide.

(3) The rate of absorption, which is surprisingly rapid on free exposure, slows down considerably on reaching a certain stage.

The above determinations were carried out in the analytical department of Messrs. Boots' laboratories.

## The Confectioners' Exhibition.

THE exhibition and market of the confectioners', bakers', and allied traders, which is being held at the Agricultural Hall this week, has proved to be no whit behind its predecessors in popularity. And deservedly so, for although there may not be such a plethora of exhibitors as on former occasions, there are several entirely novel features well worth seeing. The exhibition as a whole is bright, varied, and agreeable. There seems to be no limit to the artistic possibilities of the present-day confectioner, and the saccharine and chocolate creations of such firms as CALLARD & BOWSER, CALEY of Norwich, PEEK, FREAN & Co., and others occupying prominent central positions, and of the Scotch section in the gallery, all go to prove this. The chocolate medallions with elaborate floral and other designs seem to be the prime novelty of the year. This probably is the outcome of the popular rage for medals which our South African imbroglio induced. But besides the purely sweet-stuff and bread portion of the show there are many other good offshoots and adjuncts which appeal to the multitude. For instance, one of the exhibits which is found most interesting to the general public is the model bakery erected in an annexe near the goods entrance on the north side of the hall by Werner, Pfeleiderer & Perkins (Limited). There the whole process of the making and baking of bread and the manufacture of pastry and confectionery is demonstrated. Again, fully the half of the end gallery is occupied by a terrace of seven shops admirably fitted up by Messrs. F. E. & G. Maund (Limited), four of the windows being devoted to flour confectionery, the remaining three to sugar confectionery. The honey competition, open to all bee-keepers in the United Kingdom, has been the means of bringing together large numbers of samples of both extracted and comb honey, and a quantity of honey products. One exhibitor in this section has his bees on view in a glass case busy at work in the pursuit of their calling.

The number of exhibitors connected with pharmacy is necessarily few, but the LONDON ESSENCE COMPANY is always prominent at this Exhibition. Its white and gold pavilion is a familiar feature, and the cosy nooks and corners where its visitors are entertained make it a favourite place of resort. We found Mr. Child busy booking orders, and surrounded by the various perfected essences which are the outcome of his laboratory exertions. The latest discovery in the London Essence Company's laboratory, according to Mr. Child, is a new constituent of oil of lemon—the constituent to which the peel owes its freshness. More, probably, will be heard of this later, but for the present Mr. Child is keeping close regarding details. The company are going in largely for the bulk-perfume trade, and he showed me various samples—Heliotrope and White Violets in particular, which smelt particularly fragrant, and seemed very lasting. There is also on view a whole series of ottoes for use either for confectionery-purposes or for perfumes. The firm are importing otto of rose largely now, and fine samples of both Bulgarian and French ottoes are to be seen. A series of terpeness oils, of which Mr. Child is very proud, are in evidence, the terpeness oil of lemon being strong in smell and taste, and guaranteed to keep its freshness for years. There are also terpeness oils of sweet and bitter oranges and of limes, the last being much used in combination with the lemon. The firm are now in a position, we learned, to supply wholesale both fruit and soluble essences at low prices, and as the perfumery-department at the Camberwell works has been separated entirely from the other departments, greater facilities are obtained for coping with this increasing branch. The telephone which the company with commendable enterprise have erected at their stand was the only one we saw in the Exhibition. The MANCHESTER CHEMICAL COMPANY have a large enclosed pavilion, where many visitors are entertained, and the merits of the diastasic super malt-extract, Citroline of various strengths for baking powder and self-raising flour manufacturers (made to meet the requirements of the 1900 Food and Drugs Act), Acidine (a substitute for cream of tartar), and all kinds of essential oils, soluble essences, and colourings are disclosed. An exhibit of a similar character is made by the CONFECTIONERS' VEGETABLE COLOURS AND FRUIT ESSENCES

COMPANY (LIMITED), who besides make a speciality of Schaefer's ice-cream freezers. Ice-cream powders are also pushed in this connection, besides essential oils and some nicely-got-up perfumes. HASSALL & Co. have also an enclosed pavilion, where the products of this Stratford firm are to be seen. A cream-of-tartar substitute prepared by Messrs. Hassall is named "Lasite."

Amongst the alimentary products malt-extracts of course predominate. EDMÉ (LIMITED) have a very nice pavilion where the diastasic malt-extract, yeast, and malt, malt-flours and diastasic bread are shown, and the company are also presenting cups for competition for the best bread made with their flours. A neat little booklet gives details of the firm's progress in the matter of awards for the last three years. The BRITISH MALT-PRODUCTS COMPANY shows, amongst other things, the Lothian Malt-extract, McGhie's icing-powder and Christianson's egg-preserving machine. The latter is said to keep eggs fresh after twelve months' storage. "Desiccated Regent Potatoes" are a feature of this well-patronised stand, and Almondine an agreeable paste, made of ground almonds, white of eggs, and flavouring materials. J. & G. COX (LIMITED) have a very bright and comprehensive exhibit of Cox's gelatin in packets. The "Elfin" tablet jellies are nicely-packed preparations with an agreeable flavour, and the "Wanda" flavouring-essences are also freshly and attractively bottled—pineapple, noyau, and ratafia being the favourites. BEEFNE (LIMITED) are serving hot potatoes of their food speciality—a liquid-beef extract which once was known under the name of "Esco." Occupying one of the central positions is the quadrangular stand of WATKIN'S "POMONA" CIDER COMPANY (LIMITED). "Pomona" cider and "Pomona" perry in bottles are nicely, but not too lavishly displayed, and a large variety of Herefordshire-grown cooking and dessert apples are liberally sprinkled over the stand. KAHVEE (LIMITED) are likewise freely distributing fragrant samples of Kahvee condensed coffee and coffee with chicory. The Kahvee coffee is attractively put up in bottles ranging from 6d. to 4s. each, and would, I imagine, be an easily-saleable side-line for chemists. S. GULLIVER & Co. (LIMITED) are showing a new extract for bread-making purposes called Faresto extract. It is said to be diastasic, and to "contain a nitrogenous principle which strongly stimulates yeast growth." Liqueurs, cordials, vinegars, sauces, and British wines are also to be found here. The WELCH GRAPE-JUICE COMPANY have a nice stand in the Gallery where Welch's "Concordial" is being well pushed. The firm also make a speciality of non-alcoholic invalid port, communion wine, and temperance-beverages. A handsome Matthew's soda-fountain on view and in working order enhances the attraction. "Grassine," a substitute for butter in pastries, is certified to be practically free from water and to contain no added preservative. It is also "most economical, 13 oz. of 'Grassine' doing the work of 16 oz. of butter." The exhibitors and agents are BURTON, SON & SANDERS (LIMITED). Another vegetable fat, which is regularly shown by BROOMFIELD & Co. at these exhibitions, is known as "Albene." Liqueurice confectionery in astonishing variety is displayed in glass cases and dishes by AYLIE & WORTLEY. Pontefract cakes, "chest-relievers," halfpenny "sovereign" sticks, and all kinds of piping and ribbons, cut, twisted, or fantastically-fashioned, make an interesting and entertaining exhibit. The yeast and malt show of CARTER & Co., in Bay 10, has been a popular rendezvous during the week. One of the representatives of Edmé (Limited), (for whose malt this firm has an agency) who has been at the front with the Essex Artillery and is invalided home, attends in khaki, and has on view a large assortment of relics of the war. Malt extract, bermaline extract, "Berina," a new oat-meal, and various other foodstuffs are shown by MONTGOMERIE & Co. (LIMITED). C. DE KIMPE & Co. also exhibit "Laurel" yeast and a malt extract. PEPTINE-MALTINE (LIMITED) show peptine - maltine, malt extract, and peptonised diastasic extract. GORDON & DILLWORTH TOMATO CATSUP (LIMITED) have a fine stall just by the main entrance, devoted entirely to their new process tomato catsup.

The machinery section is very well represented this year. We have already referred to the model bakery of WERNER, PFELEIDERER & PERKINS (LIMITED). This firm have another large show in one of the bays, where all manner of dough



and cake machines of various sizes, dough-dividers, spiral brushes and rainbow flour-sifters, casters, and other things are shown in profusion. W. GARDNER & SONS, besides their usual kinds of sifters and mixers, have an interesting and ingenious novelty in the shape of a "Rapid" sifter and mixer to which is affixed an essence-sprayer. This machine is intended for adding liquids, essences, colours, oils, &c., to sugars, acids, disinfectants, seasonings, or other powders and crystals while the mixing process is going on. The spray apparatus, which is attached to the end of the mixer, is worked by an air-pump. For mixing tooth-powders, lemonade crystals, or such things in quantity, this machine should prove invaluable. Another novelty is Gardner's patent steam-heating "Rapid" dryer and mixer for drying powders. The mixer has a steam-jacketed outer chamber for drying the damp powder. A revolving agitator keeps the damp powders in motion; when they come in contact with the heating mixer chamber the moisture is driven off the interior through perforated channels at the top, which are so closely meshed, however, that they prevent the escape of the dry powder. In a variant on the former gas may be used instead of steam. The "Quick-change" powder-dresser, with automatic regulating-feed, is designed for manufacturing chemists, wholesale druggists, colour-manufacturers, or perfumers who require to dress many classes and varieties of powder in the course of one day. By loosening the clamps holding the sections together the dressing-barrel can be taken apart, and another of coarser or finer mesh substituted in a few minutes, all parts being accessible, so that they may be thoroughly cleaned without fear of one powder spoiling that which follows. A "Rapid" mixer specially designed for blending or mixing furniture-polishes, creams, paints, or thin pastes is also shown. It is fitted in watertight adjustable packed bearings, which are removable for cleaning purposes. The new revised illustrated catalogue just issued by Messrs. Gardner is a well-got-up production. Soda-water machinery for hand and steam power and soda-water fountains are shown by FARROW & JACKSON (LIMITED). The "Suitall" marble draught-fountain, with tubes for automatically measuring the syrup, proved of considerable interest to the visitors at this stand. T. O'BRIEN has a new style of patent self-closing receipt-till, with or without cash-exhibitor; and he also shows many improvements in the details of the manufacture of his tills. One advantage, and a considerable one, which he gives to chemists, is that he will undertake to make tills to fit any space, and they may be had in any style, rosewood, walnut, or mahogany, to correspond with the fittings. The NATIONAL CASH REGISTER COMPANY (LIMITED) have a remarkable show of their tills. Their very latest production is an elaborate cash register, which the representative of the company assured us was capable of doing seventeen different things at one revolution of the handle. He proceeded to enumerate these things, but we lost our bearings after a dozen or two had been ticked off, and took his word for it. The machine is certainly a marvel of ingenuity, and yet seems anything but complex. The price of that particular variety—the very latest "total-adding check and itemised-record printing cash register" is 75/, but varieties may be had from 2/ upwards. The machines are finished in solid cast-bronze cases. The LINDE REFRIGERATION COMPANY (LIMITED) have a small refrigerating plant erected suitable for maintaining a temperature of about 35° F. in a properly-insulated cold store. The construction is on the dry-air principle, and the machine, which may be driven by any motive power, is suitable for the preservation of almost any kind of perishable goods. The BLACKMAN VENTILATING COMPANY (LIMITED) have an assortment of their fans and drying apparatus in their usual corner, and CALEB DUCKWORTH attracts notice with a selection of dry-fruit cleaning machines driven by small Gardner gas engines. The "Stockport" gas engine is shown by BILBIE, HOBSON & CO.

Conveyances of all kinds, in the shape of carts, cabs, vans, &c., are shown by, amongst others, the BRISTOL WAGON AND CARRIAGE WORKS COMPANY (LIMITED), W. LLOYD MACARTHUR, and BLOOMFIELD & SON.

Shopfitters are well represented. Besides Messrs. MAUND'S terrace already referred to, F. SAGE & CO. have an extensive exhibit of showcases, stands, counters, and shop furniture of all descriptions in a corner to the left of the main entrance;

and PARNELL & SONS (LIMITED) in one of the bays provide not only a varied assortment of shop-fittings, window-fittings, and show-stands, but also glass utensils, fruit-cleaning machines, and bakehouse requisites.

SPRATTS PATENT (LIMITED) show as completely and effectively as ever. The lists of doggy, pussy, and birdie specialities are always increasing, and the Spratt tower appears to lengthen and broaden at each visit. A good show is made by R. HYDE & CO. of bird-seeds, parrot-food, patent iron tonic grit, and other preparations for the delectation of our feathered favourites. The RYLANDS GLASS AND ENGINEERING COMPANY (LIMITED) are showing machine-made jam-jars, patent fruit-bottles, and patent vacuum jars. These are exhibited empty and filled. THE LAMSON PARAGON SUPPLY COMPANY (LIMITED) have a new stylographic book, which is said to cost 30 per cent. less and to be half the trouble of the Manifold book. The carbon paper is dispensed with entirely in this case, the white paper being specially prepared for using with an ordinary stylographic pen. The representative of the company had no lack of orders to complain of. Various apparatus and fittings for incandescent gas-lighting (Welsbach system) and oil-lamps made adaptable to the incandescent system are exhibited by the WELSBACH INCANDESCENT GAS-LIGHT COMPANY (LIMITED). The Governments of New South Wales and Queensland have each exhibits of the agricultural products of the respective colonies. At the stand of the latter colony a nicely-printed and illustrated "Guide to Queensland" is distributed, in which the land laws and general agricultural progress of the colony are described.

## Business Changes.

DAY'S METROPOLITAN DRUG COMPANY (LIMITED) is opening a branch in Week Street, Maidstone.

MR. HAROLD B. LEGG has purchased the business of Lovely & Co., at Bank Parade, Streatham Common, S.W.

MR. H. W. G. MORRIS, chemist, Thame, has disposed of his business to Messrs. Young & Coley, of High Wycombe.

MR. J. R. COMYNS, chemist and druggist, has purchased the business in High Street, Carshalton, lately carried on by Mr. F. Carter.

MR. E. G. GREY has taken over the chemist's business formerly carried on by Mr. Wright at 55 Lower Addiscombe Road, Croydon.

MR. W. J. ROBERTS, chemist and druggist, 2 Railway Terrace, Wallington, has taken over Mr. F. Carter's business at Cromwell Terrace, Wallington.

MR. J. C. KIDD, pharmaceutical chemist, 551 Cheetham Hill Road, Manchester, has taken over the shop and business of the late Mr. Wilkinson, chemist, of Cheetham Hill.

THE pharmacy formerly in the occupation of Mr. C. W. Warriner, chemist and druggist, corner of Union Road and Great Alfred Street, Nottingham, has been converted into a bank.

MESSRS. BOOTS (LIMITED) have taken premises on the corner of Market Place and Broadgate, Coventry, which they will open after the necessary alterations have been completed.

MR. LANCELOT ARROWSMITH, chemist and druggist, St. Ann's Row, Newcastle-on-Tyne, has disposed of his business to Mr. Foreman, who for many years has been with Messrs. Mawson, Swan & Weddell.

MR. F. CRESSWELL, chemist and druggist, 133 Burnt Ash Road, Lee, S.E., has taken Mr. John Stewart Laing into partnership. Mr. Laing established, and was proprietor of, this business many years ago.

THE executors of the late Mr. D. S. Davies have arranged to transfer the old-established business known as Messrs. Moore & Co., 45 Craven Road, Hyde Park, W., to Mr. E. A. Holloway, late of Torquay, the proprietor of the Royal Standard Wine Company, of Oxford Street, W. Messrs. Judd & Manners, the agents to the executors, negotiated the sale and are now conducting the valuation.

## Legal Reports.

### Sale of Food and Drugs Act.

#### BAKING-POWDER.

At Bristol Police Court on September 5, Sarah Little was fined 40s. and costs for selling baking-powder containing 53 per cent. of alum.

#### CAMPHORATED OIL.

At Ebbw Vale on September 6, Richard Godfrey, grocer, Cwm, Ebbw Vale, was fined 5l. for selling camphorated oil which was 46 per cent. deficient in camphor.

#### SWEET NITRE.

At the Burnley Borough Police Court on Wednesday, September 12, Mr. Robert Hitchin, chemist and druggist, St. James's Street, answered to a summons for selling sweet nitre which, on analysis, had been found deficient in ethyl nitrate to the extent of 44 per cent., as it contained only 0.977 per cent. Mr. Hitchin said the deficiency was due to evaporation owing to the high temperature recently, and probably on account of the article having been in the shop longer than usual. The analyst was inclined to think there had been a mistake in the way the sweet nitre was kept, as defendant had bought the genuine article. Defendant was ordered to pay costs.

#### MERCURY OINTMENT.

CHARLES T. BROOKS, chemist, Lower Edmonton, was summoned on September 6 for selling mercury ointment which was 34.87 per cent. deficient in mercury. Mr. Bridge, for the prosecution, produced a copy of the British Pharmacopœia, which he said was made evidence under the Medical Act of 1832 by an announcement in the *London Gazette* notifying its publication. The Bench said it was the 1885 Pharmacopœia which had been put before them, and not the one last published. As it was necessary that in a case of this kind the evidence should be of a strict character, they thought it would be better to adjourn the case for the production of the last Pharmacopœia. Mr. Bridge said that the analyst's certificate was evidence. This stated that the ointment was deficient in mercury to the extent of 34.87 per cent., his opinion being based on the fact that the sample contained only 31.58 per cent. of mercury, whereas if prepared according to the British Pharmacopœia it should contain 48.48 per cent. It had been compounded of lanoline instead of lard and snet. The Justices decided to adjourn the summons.

#### GREGORY'S POWDER.

At the Watford Petty Sessions on September 11, Mr. Robert R. Gan', chemist and druggist, Bushey, was sued for selling Gregory's powder which was made with carbonate instead of oxide of magnesia.

Mr. A. E. Ekins, public analyst for the county, said Gregory's powder was generally taken for dyspepsia, and if composed of carbonate would produce a full feeling of flatulence. He had heard that the Pharmacopœias of all countries except England and America still prescribed carbonate. He took the British Pharmacopœia as the legal standard under the Sale of Food and Drugs Act, and had never heard of decisions given on that ground appealed against.

Dr. C. H. Hall, for the defendant, said that, though chemically there was a great difference between carbonate and oxide of magnesia, medicinally there was none. In his opinion the use of carbonate with Gregory's powder was preferable to oxide as it was more miscible with water and more efficacious. If a physician prescribed Gregory's powder, and the prescription was taken to a chemist, he would expect it to be made up according to the requirements of the "B.P.," but he would not prescribe it as Gregory's powder, but as "Pulv. rhei. co."

Defendant, who stated that he had been a chemist at Bushey for about fifteen years, said he was only asked for Gregory's powder about once in eighteen months. He sold the powder in the mixture as an article of commerce. If he had been asked for "Pulv. rhei. co." he would have made it up

according to the British Pharmacopœia, which was, of course, his standard.

The Chairman (Mr. J. F. Walkins) said the Bench had made up their minds there was no fraud.

The legal point regarding the difference between Gregory's powder made from a physician's prescription and that for ordinary sale over the counter was then argued. Mr. Mainwaring Finley, for the defence, quoted the speech of Dr. Atfield at the British Pharmaceutical Conference at Plymouth last year, to the effect that the Pharmacopœia was not a legal standard.

The Chairman: He says that of a book which he is himself editing. (Laughter.)

In giving the decision of the Bench, the Chairman said the bench quite believed there was no fraud, and they did not think defendant had rendered himself liable by selling a powder compounded in the way it was compounded in other countries. It would be rather enlarging the intention of the Legislature if defendant were convicted. At the same time he wished to point out the practice was not one to be commended. They hoped for the future, when defendant was asked for Gregory's powder, and also other powders recognised by the British Pharmacopœia, that he would make up in accordance with it. The case would be dismissed.

#### COMMERCIAL MALT VINEGAR.

BEFORE Mr. Chapman, at North London Police Court, on September 8, the adjourned case of "The Hackney Vestry v. Roberts" was heard. It had reference to the sale of vinegar which Mr. Leo Taylor, the Hackney analyst, declared was made from wood acid coloured. Mr. H. T. Tiddeman prosecuted, and Mr. Crispe was counsel for the defence. The sale was admitted, but Mr. Roberts said he got the article as malt-vinegar from a provincial firm, and sold it as such. Since the adjournment the makers of the vinegar had sent their portion of the sample to a public analyst, who certified that it was malt-vinegar, and, as an arbitrator between the two, the third portion of the sample was sent to the Government laboratory at Somerset House. This certificate said it corresponded in commercial value to malt-vinegar. Mr. Crispe submitted that the Hackney analyst had not complied with the section of the Act by setting out in detail the constituents of the article analysed. He simply said it was "not of the nature, quality, and substance demanded by the purchaser." Mr. Tiddeman said that this was sufficient for his purpose, and the onus of showing that it was of the nature, quality, and substance of the article demanded was upon the defendant. Mr. Crispe: Mr. Lincoln Sutton, F.I.C., public analyst, Norwich, gives details as follows of a portion of the sample in question, and of a sample taken from the manufacturers' works:—

The first figures are the disputed sample, the second the brewers'.

|                        |        |        |
|------------------------|--------|--------|
| Total solids ...       | 1.36   | 1.28   |
| Ash ...                | 0.107  | 0.10   |
| Acetic acid ...        | 3.58   | 3.65   |
| Nitrogen ...           | 0.0399 | 0.0392 |
| Albuminoids ...        | 0.249  | 0.245  |
| Phosphoric acid ...    | 0.035  | 0.030  |
| Do. on original solids | 0.52   | 0.44   |
| Original solids ...    | 6.73   | 6.75   |
| Sp. gr. ...            | 1.0107 | 1.011  |

These vinegars are practically the same. From a consideration of these figures, and the fact that the distillates contained evidence of alcohol and aldehyde, I am of opinion that the samples are genuine malt-vinegar of low strength.

From the Government laboratory at Clement's Inn Passage, Strand, came the following details with regard to the sample submitted:—

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Sp. gr. ...                                                     | 1.01103        |
| Acetic acid (C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> ) ... | 3.72 per cent. |
| Dry solids ...                                                  | 1.43 per cent. |
| Mineral matter (ash) ...                                        | 0.144          |
| Phosphoric acid (P <sub>2</sub> O <sub>5</sub> ) ...            | 0.034          |
| Sugars as dextrose ...                                          | 0.5            |
| Albuminoids ...                                                 | 0.194          |

From a consideration of the results of the analysis we are of opinion that the sample in question corresponds to a commercial malt-vinegar.—(Signed) E. LEWIN, C. PROCTOR.

Mr. Leo Taylor said that all the analyses to an extent agreed. He said there was no evidence of its being malt-



vinegar, Mr. Lincoln Sutton said it was malt-vinegar with no strength, and Somerset House certified nothing beyond that it corresponded with a commercial malt-vinegar.

Mr. Tiddeman said he should stand upon his rights and object to Mr. Lincoln Sutton's certificate being put in unless that gentleman was present in person to declare as to the truthfulness of its contents.

Mr. Crispe replied that it was competent upon counsel, under the provisions of the Food and Drugs Act, to put in a formally-signed certificate, with details, without having the analyst in person. As a fact Mr. Lincoln Sutton was in court on the last occasion that the case was called on, but he was not examined.

The Magistrate: Mr. Leo Taylor says it is not malt-vinegar, Mr. Sutton says it is, and Somerset House says it corresponds to commercial malt-vinegar. Now, I take it that it is not a question of value or of price, but whether it is the article asked for.

Mr. Crispe: The brewer of the vinegar is here, and is prepared to say that it comes from a mash process of malt and from fermented vegetable matter.

Mr. Chapman: It is purely a technical matter.

Mr. Leo Taylor: I have said that the analyses practically agree, and I base my assertion that it is not malt-vinegar upon the absence of a salt which is precipitated by pure malt-vinegar. If you have acetic acid from wood it presents all the characteristics of the details given, with the addition of the salt. Upon the Somerset House figures I should say it is not genuine malt-vinegar.

Mr. Chapman: The declaration after the figures is somewhat ambiguous, and, taking the whole thing as it stands before me now, I should say that it is not malt-vinegar, and, therefore, not of the nature, quality, and substance demanded.

Mr. Leo Taylor: No analyst would say that there is no malt there; but one is led to the conclusion that it is coloured acetic acid because of the absence of the salts. If the salts were present they would appear in the details of the analysis.

Mr. Crispe: The only absolute evidence to hand at present is the brewer from the manufactory, and he says there is malt in it, and that it has been through the mash process.

Mr. Leo Taylor: Vinegar made from malt would have a greater percentage of solids. From what I saw there was nothing to show that it was pure malt-vinegar.

The Magistrate: That assertion is, I believe, to be met by positive testimony. With regard to the Somerset House certificates, that says nothing, because it only says that it corresponds in commercial value, and that appears to me to be that it is not malt-vinegar, but something that was equal.

Mr. Crispe: If your Worship considers it necessary to decide that point I shall ask for an adjournment, because the onus would be upon me to call the makers.

Mr. Chapman: Very well. Because on the evidence before me I shall hold that it is not malt-vinegar.

Mr. Tiddeman said the point was so fine that he would withdraw the summons if no costs were allowed.

Mr. Crispe agreed, whereupon

Mr. Chapman said: Very well, I will mark it "Summons withdrawn," but somebody must pay the guinea fee for the Somerset House analysis.

Mr. Crispe: That will be a matter for the Court.

Mr. Chapman: Oh, no; we do not pay for analyses.

Mr. Crispe: I think we had better divide it between plaintiff and defendant.

## Merchandise-marks Act.

### MINERAL-WATER BOTTLES.

AT Bowness on September 4 Edward Barker, mineral-water manufacturer, was fined 1*l.* and costs for having in four cases sold aerated waters of his own manufacture in bottles belonging to Messrs. Jewsbury & Brown, Ardwick, and Mr. J. A. Cuff, Manchester.

AT Cork last week Messrs. Jennings, Cade, Kiloh & Co., Hayden & Co., J. Daly & Co., Abbott Brothers, Murphy, and various other Cork mineral-water manufacturers were prosecuted at the instance of Messrs. Cantrell & Cochrane

of Dublin, and other Dublin aerated-water manufacturers, for having used aerated-water bottles bearing trade-descriptions falsely applied. It was suggested that the cases be taken all together, but the Magistrates decided to take each case as it came. There were, it was said, forty-three summonses in all. The case of Messrs. Jennings was taken first, and for the prosecution it was stated that defendants had used the prosecutors' bottles for their own mineral-waters. Defendants put their own paper labels on the bottles, but the complaint was that the bottles bore the embossed trade description of the complainants and others. It was not suggested that there was any intent to defraud on the part of the defendants, and complainants did not wish to press severely if an undertaking were given that the defendants would not in future fill these bottles. Evidence of the purchase of bottles belonging to Messrs. Cantrell & Cochrane, Messrs. Ross & Son, Bewley & Draper, and others with defendants' labels affixed was given by Mr. W. G. Knight, Dublin. In the course of Knight's examination a bottle was handed him belonging to Kiloh & Co. (Limited), of Cork, bearing Cantrell & Cochrane's label. He was asked what should have been done in that case, and said that Cantrell & Cochrane ought to be prosecuted. For the defence it was submitted that if an offence had been committed it was one of a purely technical character. Complainants did not allege fraud, and in the hot weather the firm in the period of a few weeks distributed an enormous number of bottles, their purchase to replace wear and tear and allow for extension of trade last year amounting to between 200,000 and 250,000 bottles. It was impossible to prevent a considerable number of the bottles of other firms coming back to them, and in the hurry of filling it was impossible to prevent them going out. On behalf of Messrs. Kiloh & Co., of Cork, it was stated that their annual purchase of bottles to make up for wear and tear amounted to from 800*l.* to 1,000*l.* It was, however, pointed out that Messrs. Kiloh had issued a circular to their customers intimating that they did not receive Belfast or Dublin manufacturers' bottles, as they would not allow them to be filled, and would only allow them to be changed at a loss of 8*d.* per dozen. The case of Messrs. Hayden was allowed to be struck out. Mr. Mayne, R.M., giving his decision, said as far as the firms mentioned were concerned no one who knew them would for one moment suggest the slightest intention of fraud, but offences had been committed. A small penalty of 6*d.* and 2*s.* 6*d.* costs in each case would be inflicted, and an undertaking had been given in public court that defendants would do their best to avoid this practice in future.

## The Ulster Chemists (Limited).

### PETITION FOR WINDING-UP.

ON September 7, before Mr. Justice Burton in Queen's Bench No. 1 Court, Four Courts, Dublin, Mr. H. Wilson made an application to his Lordship to fix a day to file a petition for the winding-up of this company, which he called "The Chemists Company (Limited), Belfast." The company had been floated with a capital of 100,000*l.*, divided into 10,000 preference shares of 5*l.* each and 50,000 ordinary shares of 1*l.* each. The company, counsel said, had got into a bad way, and the directors had been found to have contracted with the company on terms not strictly right. One of the terms on which they sold to the company was that they should be at liberty to purchase back on paying cash for the stock only and surrendering the shares. At a recent meeting of the company a resolution for voluntary winding-up had been passed. The directors had now threatened an action for specific performance. It was likely, if the petition were not filed as soon as possible, that serious damage would be done to the company.

His Lordship said he would hear the matter on September 19.

AT INHAMBANE (Portuguese West Africa) there is a considerable trade done in soap imported almost entirely from Marseilles, and the British Consul at the former place thinks that it would be worth the while of British manufacturers to direct their attention to this.

## Gazette.

### Partnerships Dissolved.

**Bristow, W. M., and Anderson, W. C.,** under the style of Bristow & Anderson, Liscaud, Egremont, and Seacombe, physicians and surgeons.

**Duncanson & Raffan** (Jessie Duncanson and John Raffan), 38 Port Street, Stirling, chemists. Business continues to be carried on for Mrs. Jessie Duncanson by her son, James Duncanson.

**Hoare, W. R., Hillman, E. S., and Hunt, A. J.,** under the style of W. R. Hoare & Co., Cornwall Road, Notting Hill, W., chemists and druggists; so far as regards A. J. Hunt.

## New Companies & Company News.

**ANTI-CORPULENCY SOAP SYNDICATE (LIMITED).**—Capital 2,500*l.*, in 1*l.* shares. Objects: To manufacture and deal in fat-reducing soaps, shampoo-washes, toilet-requisites, proprietary articles, &c. The first directors are Lieut. Colonel R. G. Wharton, G. S. Boutall, and C. W. Blacklock. Qualification, 100*l.*

**EDWARD CHARLES & CO. (LIMITED).**—Capital 10,000*l.*, in 1*l.* shares. This company is to acquire the business now carried on by Edward Charles at Bulwell, Nottingham, which appears to be connected with dyers of lace, but includes the manufacture of vitriol and bleaching-materials, soap-manufacture, oil-refining, glycerin-manufacturing, chemists, druggists, &c.

**DEANSGATE PAINT COMPANY (LIMITED).**—Capital 2,000*l.* Objects: To acquire the business carried on in Manchester by J. E. Creer, and to carry on the business of oil, paint, colour, varnish, chemical, enamel, soap, glue, and glycerin manufacturers and merchants, drysalts, &c. The first directors are B. Marks and J. E. Creer. Qualification, 100 shares. Registered office, 262 Deansgate, Manchester.

**MYNAME SOAP COMPANY (LIMITED).**—Capital 6,000*l.*, in 1*l.* shares. Objects: To manufacture and deal in perforated soaps bearing Christian names, surnames, texts, souvenirs, and words, known as "Myname soap," and to carry on the business of perfumers, grocers, chemists, druggists, soapmakers, manufacturers of proprietary and patent articles, and toilet-requisites, &c. The first directors are J. E. Lyndall (managing-director with 350*l.* per annum), and others to be appointed by the subscribers. Remuneration, 100*l.* each per annum, and 50*l.* extra for the chairman. Registered office, 59 Eastcheap, E.C.

**WELSFORD'S EUPHICA SYNDICATE (LIMITED).**—Capital 7,000*l.*, in 1*l.* shares. Objects: To acquire Trade-mark No. 193,213, the secret process for preparing a proprietary medicine known as "Welsford's Euphica," and the goodwill of the business of Welsford & Co., and to manufacture and deal in the said medicine. The first subscribers are:—J. R. Beckett, 57 Cambridge Road, Iford, accountant; R. W. Flood, 166 Railton Road, S.E., clerk; J. M. Hendry, 211 Rathcoole Avenue, Hornsey, N., gentleman; W. Wells, 48 Torriano Avenue, N.W., clerk; W. M. Christie, 3 Handsworth Road, West Green, N., gentleman; H. W. Stowell, 31 Upper Tollington Park, N., gentleman; and W. W. Davies, 178 Ramsay Road, Forest Gate, gentleman. Table "A" mainly applies.

**KILNER BROTHERS (LIMITED).**—We understand that Messrs. Kilner Brothers, bottle-manufacturers, of Thornhill Lees; Conisborough, Yorks; and King's Cross, London, have converted their business into a private limited-liability company for family reasons. None of the capital has been issued outside the firm or family.

**ULSTER CHEMISTS (LIMITED).**—We deal under "Legal Reports" with an application to the High Court of Chancery, Dublin, for the winding-up of this company. Two petitions for winding-up have been presented. One of these has been lodged by the company, and the other by Delbanco & Co., 19 Temple Street, Liverpool, Lancashire, importers and creditors of the company. Both petitions will be heard before the Vice-Chancellor at the Four Courts, Dublin, on Wednesday, September 19, and any creditor or contributory of the company desirous to support or oppose the making of an order on the petitions may appear at the time of hearing by himself or his counsel for that purpose, notice of the fact being given before September 17 to Mr. Robert J. Porter, solicitor, 1 College Street, Dublin, and 143 Royal Avenue, Belfast, in the case of Messrs. Delbanco & Co.'s petition.

**KEMP & CO. (LIMITED), BOMBAY.**—The annual report of the board of directors for year ending June, 1900, states that the debts and liabilities, as shown in the balance-sheet, amounting to 78,432*rs.*, have been liquidated. It is proposed that the sum of 2,061*rs.* be written off for depreciation. The balance of profit and loss account is 50,381*rs.*, which the directors recommend to be disposed of as follows:—Dividend of 12 per cent. on paid-up capital, or 21*rs.* per share, 42,000*rs.*; deterioration of building, 698*rs.*; deterioration of plant and furniture, 1,363*rs.*; bad debts, 445*rs.*; bonus to staff, 3,700*rs.*; and to reserve fund (which now stands at 2,32,052*rs.*), 2,174*rs.* Two of the directors—Mr. Rustomjee N. B. Jeejeebhoy and Mr. Hurkissondass Nurrotamdass—retire from office by rotation, but are eligible for re-election. The auditors also retire from office, and it will be for the shareholders present to elect auditors for the ensuing year and to fix their remuneration.

**PRICE'S PATENT CANDLE COMPANY (LIMITED).**—At an extraordinary meeting of this company held on September 7, the Chairman (Mr. T. C. Wright) explained that the meeting was called in order to declare a half-yearly dividend of 18*s.* per share, the same as that distributed for the corresponding period of last year. That the dividend had remained at that figure, with but a slight decrease in the amount carried forward, was a matter for congratulation, as paraffin had gone up in price 82 per cent. and other materials to a smaller extent. The present of soap and candles made by the company to the troops in South Africa were highly appreciated, and the Chairman read letters of thanks from men at the front. He stated, in conclusion, that the company's exhibit had received the highest possible award at the Paris Exhibition—a Grand Prize. Sir Peter Spokes seconded the adoption of the dividend, which was unanimously carried.

## Personalities.

**MR. F. KEMP**, who has been so long associated with the Australian Drug Company (Limited), Sydney, N.S.W., is now in London mainly on business, and letters to him may be addressed to the *C. & D.* office.

**MR. GEORGE ANDREW CLARK**, son of Mr. Richard Clark (Raimes, Clark & Co.), Edinburgh, has been gazetted Second Lieutenant in the 3rd Battalion Seaforth Highlanders (Ross-shire Buffs, the Duke of Albany's).

**MR. J. A. HEATON**, the President of the Burnley and District Chemists' Association, and an energetic pharmaceutical politician, has been unanimously chosen as Conservative candidate for Trinity Ward at the November election. Mr. Heaton is already a member on the Burnley Board of Guardians.

**MR. GEORGE H. C. ROWLAND** has lately been taken into partnership by Mr. J. C. Pottage, 117 Princes Street, Edinburgh, with whom he has been an assistant for several years. In 1898 Mr. Rowland occupied the presidential chair of the Edinburgh Chemists' Assistants' and Apprentices' Association, and last year that of the Pharmacy Athletic Club.

**MR. JOSEPH BEECHAM**'s mayoralty in St. Helens has been so successful that he has been asked to take this office for another year. There never has been such a happy time for St. Helens as during this year, and Mr. Beecham has pleased all parties. He has not yet decided whether he will take another year of it. His own business, admirably organised though it is, needs his close attention, and the mayoral chair is no sinecure. This week, for example, Mr. Beecham is entertaining the Bishop of the diocese, and 1,500 guests have been invited to meet his Lordship.

**MESSRS. HAYWARD-TYLER & CO.** have received an order from the Government for three complete plants of aerated-water machinery, boxes, bottles, and all accessories for hospital use for the troops in China. The order was received on August 21, and the whole complete was shipped by the s.s. *Socotra* on August 25. Time being limited, and bottle and box makers not being able to fill orders upon so short notice, Messrs. R. White & Sons (Limited), Camberwell, S.E., supplied those from their stock. The six days was the extreme limit that Government would allow for shipping.



## Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

*From the "Trade Marks Journal," September 5, 1900.)*

"HYPOGLYNE"; for pharmaceutical preparations. By Price's Patent Candle Company (Limited), 31 Threadneedle Street, E.C. 232,484.

"ROSS'S ROYAL," device and wording on label; for beverages, syrups, and cordials. By W. A. Ross & Sons (Limited), 17 & 19 William Street South, Belfast. 231,931.

"KOMAL"; for mineral and aerated waters. By J. G. Ross, 6 Sunbury Place, Edinburgh. 231,488.

CRANI TONIC and device; for hair-preparation. By A. F. Richardson, 206 Temple Court, New York. 232,231.

"ZONIA"; for hair-shampoo. By Annie Cowell, 38 Gauden Road, Clapham, S.W. 232,255.

"CUROSA"; for perfumery and toilet articles. By James L. Thomas & Co., 162 Fore Street, Exeter. 232,512.

*(From the "Trade Marks Journal," September 12, 1900.)*

"KOPTICA" and device; for veterinary liniment, and also powder. By G. W. Roberts, 13 Corve Street, Ludlow, Salop. 229,211, 229,212.

"AUDESOL" (no claim for "Audes"); for a disinfectant. By A. Duckham & Co., Phoenix Wharf, Millwall, E. 231,532.

"THE TUG-OF-WAR" and device; for fly-papers. By W. & H. Jackson, 13 Lydia Ann Street, Liverpool. 231,552.

"EXTERMITAS"; for a disinfectant. By the Elephant Chemical Company, 174 Neate Street, Camberwell, S.E. 232,040.

"THE TED WEEKS ORIGINAL" portrait and signature; for medicinal preparation. By E. T. Weeks, 11 Union Terrace, Plymouth. 229,222.

"LIQUOR PHENATI"; for dental mouth-wash. By A. Currie, 162 Ferry Road, Leith, N.B. 231,505.

"KROLEI"; for an ointment. By Reynolds & Branson (Limited), 14 Commercial Street, Leeds. 231,841.

"VETOLENE"; for headache-cure. By E. Lambert, 4 Michael Street, Peel, I.O.M. 231,912.

"ELBAHSAW" and signature of applicant; for surgical trusses. By Vincent Wood, 4 Albion Place, Blackfriars, S.E. 231,352.

"PANOPEPTON"; for all goods in Class 42. By Fairchild Brothers & Foster, New York, U.S.A. 231,582.

Device; for mineral and aerated waters and perfumery. By W. H. Hibbert & Co., St. James's Square, Manchester. 232,446, 232,447.

Signature of applicant; for perfumed and other soap. By Blanche Leigh, 231 Oxford Street, W. 231,255.

"EAU DE COLOGNE DE CIMIEZ" and device on label; for a perfume. By A. Nicholls, 4 Avenue Messina, Nice, France. 227,795.

"TRILBY-POWDER" and device; for toilet-preparation for the feet. By J. C. Round, 19 Crescent Wood Road, Sydenham Hill, S.E. 232,125.

"FYRICIDE"; for a fire-extinguisher. By A. Keene, 75 High Holborn, W.C. 231,882.

## New "C. & D." Books.

*Published at the offices of "The Chemist and Druggist,"  
42 Cannon Street, London, E.C.*

**Veterinary Counter-practice: a Treatise on the Diseases of Animals, and the most Suitable Remedies for Them.** Written expressly for chemists and druggists by Members of the Royal College of Veterinary Surgeons. Third edition, revised and enlarged to 352 pages, with illustrations. Price, 3*s.* 6*d.* net; by post, 3*s.* 10*d.*

**The Art of Dispensing: a Treatise on the Methods and Processes involved in Compounding Medical Prescriptions.** Sixth edition, revised and enlarged. Crown 8vo. Pp. viii. + 490, with numerous illustrations, and bound in buckram. Price, 5*s.* 6*d.* net; by post, 5*s.* 10*d.*

### Opinions on the New Edition.

"I like it very much. It is greatly improved and up to all that a student requires." (59/19.)

"I congratulate you on this vastly-improved edition. The matter is of an eminently practical nature, and cannot fail to be of the greatest use to the busy dispensing chemist as a time-saver in case of difficulty. A day or two ago I had some aristol suppositories to make combined with other things, and found the note on aristol saved me making perhaps two or three batches." (177/80.)

The fifth edition of this successful book having been six times reprinted, it has at last been found desirable to publish a new edition, in which the work has been entirely recast and largely expanded, the added matter covering more than 200 pages. A good example of the nature of the extensive revision is afforded by the section on suppositories, bougies, and pessaries, which now occupies twenty-eight pages, as against thirteen in the fifth edition. The added matter, too, is all useful, not mere padding. The other sections are expanded and improved in proportion, and it is satisfactory to know that pharmaceutical students have such a reliable work of reference to depend upon. So far as dispensing can be learned from books, it can be efficiently learned from this volume.—*Pharmaceutical Journal.*

Either of the books may be obtained at the published price, *plus* postage, from the offices of THE CHEMIST AND DRUGGIST in London and Melbourne, Vic. The new editions have been stocked by the following wholesale houses, from whom they may be obtained with goods at the net prices:—

Ayrton & Saunders, Liverpool.  
Barclay & Sons (Limited), London.  
Boileau & Boyd (Limited), Dublin.  
Edwards, Wm., & Son, London, E.C.  
Evans, Lescher & Webb, London.  
Evans, Sons & Co., Liverpool.  
Fletcher, Fletcher & Co., London.  
Glasgow Apothecaries' Company, Glasgow.  
Grimwade, Ridley & Co., London.  
Ismay, J., & Sons, Newcastle.  
Lennon (Limited), London.  
Lewis, H. K., Gower Street, W.C.  
Lloyd, Howard, & Co., Leicester.  
S. Maw, Son & Thompson, London.  
May, Roberts & Co., London.  
F. Newbury & Sons, London.  
Pinkerton, Gibson & Co., Edinburgh.  
Raines & Co., York.  
Raines, Clark & Co., Edinburgh.  
Sanger & Sons, London.  
Southall Brothers & Barclay, Birmingham.  
Sutton, W., & Co., London.

In the United States the new edition of "The Art of Dispensing" may be obtained, duty paid, from Messrs. McKesson & Robbins, of New York City.

**SAD DEATH OF A CHEMIST.**—At Hackney on September 10, Dr. Geo. E. Yarrow, Deputy-Coroner, held an inquest respecting the death of Arthur Bedells (57), chemist and druggist, of 78 Chatsworth Road, Lower Clapton. Mrs. Ellen Bedells, of 81 St. Ann's Street, Weymouth, identified the body as that of her brother-in-law. On the previous Wednesday she arrived at Clapton on a visit to him, and found he had been suddenly taken ill, and ten minutes later he died. Mr. Richard Oliver Craig, commercial traveller, of 136 Chatsworth Road, said that about 6 p.m. on the Wednesday he called upon Mr. Bedells, who was in the shop, and apparently in good health. They were engaged in conversation for some time, when deceased suddenly changed colour and leaned forward on the counter. He went round to his assistance, and found him unconscious. Witness got him into the back parlour and sent for assistance, and a doctor arrived, but Mr. Bedells expired shortly afterwards. Witness added that there was nothing to excite the deceased in their conversation. Dr. John H. Brunski I, of 97 Chatsworth Road, stated that death was due to apoplexy, and the jury returned a verdict of natural death.

MR. N. M. THOMSON, of the firm of Messrs. Maurie Brothers & Thomson, the leading aerated-water machinists in Australia, has started on his return to Melbourne *via* the United States, having spent several weeks here completing business arrangements, including, among others, arrangements with Idris & Co. (Limited) for the sale of their No. 1 English syphons and seltzogenes in Australia.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

#### Insulting to Chemists.

SIR,—In reading the report of the unjustifiable remarks of the city Coroner at Canterbury that “chemists’ laudanum is 25 per cent. weaker than that supplied by medical men,” I was greatly astonished to find that all that was proposed to be done by the Pharmaceutical Society to confute this general libellous imputation was that “the local secretary may be expected to take notice of the occurrence.” As far as anything has appeared publicly to the contrary, the stigma on the whole body of chemists still remains unexplained and unapologised for. Since that another libel of a more flagrant and serious character has been expressed in a letter signed “James Edmunds, M.D.,” which was referred to in the *C. & D.* last week, the writer therein asserting that the carbolic-acid scheduling regulations come on the one hand “from the desire of a particulare incorporated trade to grab from the community profits for which it gives no equivalent in the way of public service.” This is so grossly insulting, untrue, and libellous, that if written in respect to an individual it would be most detrimental to his business, and the insertion of such remarks in the public press liable to prosecution as a libel. I am astounded that the Pharmaceutical Society has not called for, and demanded from Dr. Edmunds at least a public retraction of his statements, and an ample apology to the chemists of the kingdom.

Yours truly,

Worcester, September 11. JOHN TWINBERROW, Ph C.

#### Ethical Advertising v. The Other Kind.

SIR,—Your correspondent, “Miscellaneous Chemist,” is thanked for his miscellaneous effusion, of which I am the notorious victim. As to my advertisement, allow me to explain that it is intended as a kind of homœopathic corrective of the vulgarities and follow-my-leader nonsense that constantly afflict us in this connection. Here is a specimen:—

#### Patent Medicines and Proprietary Goods at Wholesale Prices.

|                                   | Usual price | Our price   |
|-----------------------------------|-------------|-------------|
| —                                 | s. d.       | s. d.       |
| Allen's restorer ... ..           | 6 0         | 3 6         |
| Beecham's pills ... ..            | 1 1½        | 0 10½       |
| Bland's pills... ..               | 4 6         | 1 0         |
| Carter's pills ... ..             | 1 1½        | 0 11        |
| Eno's fruit-salt ... ..           | 2 9         | 1 10        |
| James' liver-syrup... ..          | 1 1½        | 0 9         |
| James's American female pills ... | 4 6         | 3 9         |
| Owbridge's lung- tonic ... ..     | 1 1½        | 0 9½        |
| Siegel's syrup ... ..             | 1 1½        | 0 11½       |
| Thompson's sarsaparilla ... ..    | —           | 2, 6 & 4, 6 |
| Valentine's juice ... ..          | 4 6         | 3 0         |
| Van Houten's cocoa ... ..         | 1 1½        | 0 9         |

Depot for Bradley's hair-restorer, 1s. 6d.  
Chamber's walnut hair- tonic, 2s., 3s.

This is a cutting from the same weekly that contains my own: one on the right-hand corner, the other on the left. For some few years I have been awaiting an opportunity to oppose with something original this piece of old-fashioned cant. “M. C.” should know that I employ the phrase *pro bono publico* as a somewhat vulgar equivalent to the more erudite and classical *Habenda ratio volemdinis* of our common

(pharmaceutical) flag. As to “dirty drugs,” *ex uno disce omnes*. There may be seen at this present moment, not five minutes' walk from here, in a leading thoroughfare, a large lot of unprotected mag. sulph. in a chemist's window marked “Epsom salts, 1d. per lb., 7 lbs. for 6d.” Anyone looking closely can see the dust and fly-dirts amongst the shining crystals, although I am informed by a lady that the mass is stirred about every morning to bring the less dirty uppermost. As to “factory-made physic,” the man in the street understands its force if “M. C.” pretends *he* does not. Ever since about twenty-five years ago, when arsenic was found in violet powder and traced to the *terra alba*—a stuff used to adulterate the starch, of which the article ought to be mainly compounded—I have, to avoid the factory-made altogether, had it prepared here. Lastly, the puffs—the Swansdowns—both in the nursery and the barbers' shops these dirty things are spreading various miserable skin-diseases. I make a wide distinction between “washing” and “cleaning”—it is cleaning and keeping clean within and without that is needed for health of body or mind, needed physically and morally; the washing is mere pleasure. As a young man I used to be as ready as anyone to make another an offender for a mere word; but since I put away childish things I have learned to apply to matters moral the principle of the learned judge's dictum *re* matters toxicological, *De minimis non curat lex*.

Yours very truly,

39 Church Street, N.W.,  
September 11.

J. C. HYSLOP.

#### Moderates v. Extremists.

SIR,—I have received a long and interesting letter from a chemist in London, in the course of which he says I might have been of great use to pharmacy had I been more extreme in my views regarding limited companies. I believe there are many extremists throughout the country, and this remark does not call for an apology from me so much as it calls for an explanation on behalf of the moderate party. We are just as extreme in our views as the most rabid extremists in the country, but we recognise that in matters political extremists seldom succeed in accomplishing anything. We think that ours is a case in which pharmacy can only be set upon a firm base after a long climb upward, which can only be accomplished step by step. To try to reach the summit at one bound will lead to disaster. The Bill under consideration ought to be confined to public companies entirely, and ought to be drafted in accordance with what Parliament showed a disposition to grant. When it is done with, our next care will probably be the drafting of a clause dealing with public institutions and dispensing done by unqualified people in various places which do not at present fall within the scope of the Pharmacy Act. In short, the programme of the moderate party contains but three items:—(1) Keep on educating all classes of the community in regard to our calling; (2) move forward step by step, and never try to run, but (3) never think of sitting down.

I observe that “Xrayser” has got into hot water on this side of the Tweed, but I think he is right when he ascribes the irritation here to general discontent with Bloomsbury Square management. A letter of mine published in the *C. & D.*, headed “Riding for a Fall,” and dated February 19 of this year, gives a fair forecast of what is happening as a result of Bloomsbury Square mismanagement. The new regulations, particularly regarding the Preliminary examination, have made apprenticeship to the drug-business practically impossible.

It is acting on a false hypothesis to suppose that we can better our calling by attempting to bring the sons of wealthier parents into it: what we ought to do is to see that the conditions under which we exercise our calling are so improved as to induce a better class of men to enter it. The authorities have by long neglect of these conditions brought us face to face with almost unsurmountable difficulties, but by a supreme effort of stupidity they have most certainly in this matter of the Preliminary brought us in contact with the veritable insoluble problem itself. The causes which have lead up to all this are easy to trace. By a long period of inaction and neglect the Council has not only succeeded in bringing our calling into an almost hopeless condition in the country, but it has succeeded in bringing on a financial position at Bloomsbury Square which makes some fresh raid on some section of the pharmaceutical community



necessary from time to time. The last raid, by which the apprentice pays his two guineas without submitting the Society to the expense of an examination of any kind, and the Minor man pays his ten guineas whether he is able to present himself for examination or not, has been more than the overburdened pharmaceutical camel can stand. Only one result can follow: apprentices will get scarcer, applicants for the Minor examination will get fewer, and unqualified hands of various kinds will be more and more in demand. The shops will soon be worked with girls almost entirely.

I am all in favour of education, but I emphatically object to education being made a mere stalking horse for a bungling management to ride.

The natural result of all this must be the abolition of apprenticeship, the establishment of a compulsory curriculum, and a purely academical course just as we have in medicine. By this means we may turn out very scientific chemists, but how are we to do without good countermen?

Dumfries, September 10.

JAMES REID.

#### Pharmaceutical Politics.

SIR,—I have perused the recent letters in the *C. & D.* regarding the approaching election, and, as far as I can understand them, the writers are all bent on the destruction of pharmacy. In the first place many writers propose placing the adopted Pharmacy Bill before both candidates and giving the united support of the chemist to the one that is the more favourable to us. Now, Sir, this would be a fatal mistake. Have the advocates of this system ever heard of political agents? I take it in every case it would be the duty of the agent to report to his central office. Thus, if the example of a late by-election were followed, how would you get your Bill through the House of Lords? I say it would be impossible. You may ask what ought the chemists to do? My answer would be that it is the duty of every chemist to take an active part in the coming election, and support the candidate of his choice whether Liberal or Conservative. Then we shall have plenty of friends in the House of Commons, and no Bill could possibly pass that would injure our trade, and it would be quite possible to get a moderate Act for our benefit. To give an example, I know one chemist who obtained the sympathy of three members of Parliament, and he knows they were all opposed to Clause 2 of the Companies Bill.

Yours sincerely,

ALDERMAN AND J.P. (180.4).

#### Assistants and Employers.

SIR,—Whatever inherent qualities a man possesses, those characterise him in whatever sphere he may act. The assistant who suffers from chronic discontent will most probably be a victim to the same malady when he becomes a proprietor. Assuming the above statements are tolerably correct, in the letter of "Another Who Knows" we have a brilliant reflection of the author's propensities when an assistant, assuming he has filled that honourable capacity. Therefore it is unfair to assistants in general that they should be condemned under the disastrous influence of a biased opinion. I do not for one moment overlook the fact that there are a number of fellows roaming the country unworthy of the profession. The same may be said of employers. Looking at "Another Who Knows" letter more in detail, he says he has taken holidays sixteen years out of thirty-five years. May I ask when he took the first holiday? Was it after six years in business, when the customers had been trained that no one could serve them properly but the proprietor? The fact that he was away was sufficient reason for the customers obtaining only what was absolutely required. Further, is it not probable that the holidays were chosen during the quietest time in the year (not altogether a disadvantage), when the majority of the customers were themselves away, or, if the business is in an industrial locality, when there were excursions in connection with works or factories? If employers were to show more confidence in their assistants, and practically appreciate the intrinsic value of a conscientious man (they are to be had), they (the employers) would have less occasion to grumble, and the stores would have less of the advantageous services of good men. The ideal employer, I am afraid, is as much of a *rara avis* as the ideal assistant.

Yours faithfully,

ESSE QUAM VIDERI. (178/29.)

#### Test-tube Marking.

SIR,—In our old student days when cash and apparatus were scarce we were taught to be self-reliant and inventive, and one can recall many anecdotes told of Faraday and other pioneers of the arts and mysteries of alchemy. It struck me as I read the suggestions of Mr. Alcock that his method of marking would be good for trade, for I wonder how many test-tubes would stand the pressure of a "Mounted Diamond?" I would suggest an easier, cheaper, and, at the same time, instructive method—viz., to coat the tube with melted tallow, paraffin wax, or soap, and with an ordinary mounted needle, such as used in microscopy, make the markings, and then submit to the action of hydrofluoric acid, and thus etch whatever figures were required.

Yours truly,

WEST RIDING. (179.32.)

#### Locum-Tenens' Experience.

SIR,—I have been a *locum-tenens* for over thirty years, and I must say that the retrospect is not very cheering to look back upon. I have managed temporarily for over 160 chemists in different parts of England and North and South Wales, and out of that number there are only about twenty that I should like to manage for again. The state of many pharmacies is a disgrace to the proprietors. In many places that I have gone to half the bottles were incorrectly labelled, and in many cases there were no labels on at all. First when I went out the proprietor would have a long list of stock to be got up. Well, being good-natured, I used to get it up, but it was seldom appreciated. Another thing; many chemists when they return from their holiday expect you have taken more money than they would have done themselves, and if you take a few shillings less than they do, they think you have been robbing them. There are, of course, honourable exceptions—gentlemen who treat you as if you were a human being. I managed a very large business a little time ago, and the gentleman grumbled when he came back because I did not in every case take a copy of what I prescribed for his customers. I ask you, Sir, is it possible for a man single-handed, when there are a dozen customers in the shop, to do it? He did not do it himself. If you manage for the stores they treat you much better and do not expect impossibilities from you. I must say that if many chemists treat their permanent assistants no better than they do their temporary managers, the assistants are not to be blamed for taking situations at the stores. Not long since I went to manage for a chemist who professed to be very pious. Well, I was with him two weeks all but half a day; and he had the meanness to deduct the half-day from my salary, although I reminded him that there were two days lost in travelling, for which I got no pay whatever, it being a long distance from Oxford, where I reside. Some time ago I managed a business in —, in which I found a bottle labelled "aqua dest." I never take for granted that a bottle is labelled correctly. I took a good smell at it and was put *hors de combat*—that is, I fell flat down on my back behind the counter. Would you believe it, the bottle labelled "aqua dest." in gold letters was liq. ammon. fort.! The proprietor of that shop richly deserved three months' hard labour. These are a few of the great difficulties which the much-maligned *locum-tenens* has to encounter. Perhaps other locums will give their experiences, which may be much more interesting than mine.

Yours truly,

J. MASON.

#### Colonial Chances.

SIR,—Your reply to "Neuros" in your issue of May 23, 1900, *in re* emigration, is sensible and in accordance with the facts of the case in so far as it applies to Queensland. An unqualified assistant landing here has nothing to recommend him, as even the very best testimonials written 13,000 miles away are useless, because the writers are unknown and cannot be referred to. To succeed in the country districts (the big towns were overdone years ago) a chemist must have quite a number of subjects at his fingers' ends besides his own special avocation—viz., dentistry, veterinary surgery, analysis, and assaying. A knowledge of natural history, particularly of insects, is a great advantage. To all this add capital, and there is a fair chance of making a living here. But the man I have pictured can make a much better living in the British Isles, and if he is married should stay

at home, as it is brutality to bring an Old-Country wife to the fearful climate we enjoy (?) here, with a temperature ranging from 26° F. to 118° F. in the shade. The best thing an unqualified or qualified man can do is—stay at home.

Yours, &c.,

Queensland, July 21.

PLATYPUS. (172/48.)

### Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

712. *Zephyr*.—A wine-licence is now commonly regarded as a necessity for carrying on a chemist and druggist's business, so as to cover the sale of "medicated wines"; but as your lease has a clause in it regarding the business to be conducted in the shop, it would be wise on your part to tell your landlord in a diplomatic way that you are to apply for the licence in order to sell medicated wines. If he objects, reason with him.

169/10. *Bobs*.—If you have any evidence to support your statement that the assistant agreed to take your situation, subject to his character being right, and then refused to fulfil his engagement, you could certainly get redress, but it would cost you more than it is worth. The payment of his fare was not part of the engagement.

169/72. *G. A. P.*—The label by itself does not render the medicine liable to stamp-duty.

179/23. *Vino*.—Strange to say, salt of lemon is not on the British schedule although it is elsewhere in the Empire. Fly-papers containing arsenic are, of course, covered by the Pharmacy Act, and none but registered chemists may retail them.

178/58. *Nax*.—Stamped proprietary medicines can only be made or sold by persons whose premises are licensed for the purpose. The fact that your business is a postal one does not alter the case. Your other question is answered on page 434 of our last issue.

1623. *Rad. Rhei*.—It has been stated in the official journal of the administrators of the Pharmacy Act, that creosote is not to be regarded as within the meaning of "carbolic acid and its homologues." Chemically it is, but if you should happen to be prosecuted by the police for not labelling creosote "Poison," the official statement will be a palliation, if not a complete defence.

171 45. *Anxious* is first trustee for some property under a marriage-settlement, and the second trustee is an absconding bankrupt. How does "Anxious" stand? Will his signature suffice, or is it necessary to appoint another trustee in place of the absconder? [Without seeing the settlement itself we are unable to properly advise our correspondent on the points. It may be (although we think it very improbable) that it is not necessary to appoint another trustee in the place of the defaulting trustee, but if the nature of the investments is such as to make it impossible for our correspondent to act alone, it will be necessary for him to apply to the High Court for an order removing the defaulter and appointing a fresh trustee in his stead. If the estate is under 500*l.* the local County Court has jurisdiction. A proof should be lodged by the *cestui que* trust in the bankruptcy of the defaulting trustee for the loss (if any) to the trust estate.]

168/69. *House-duty* puts the following:—Can he be compelled to pay the following charges in respect of house-duty and income tax, Schedule A, which have been sent in to him since he paid the amount demanded in January last? From September 29 of last year he has rented, on lease, business premises (house and shop combined) which had previously been occupied as private house only. Last January he received notice of amount due for these two items from September 29, 1899, to April, 1900, which he paid. The charges appeared to be based on the rental that had been paid by the tenant who had occupied the premises previous to alteration. He now receives a further demand-note which

is described as balance due for the same period. Can this be legally enforced? [The Commissioners would be acting within their powers in making an additional assessment in respect of the premises, provided they made it within four months of the end of the financial year, which ended on April 5 last.]

### Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

152/10. *Unguent*.—Dr. Shoemaker, in his paper on the oleates before the Medical Society of the State of Pennsylvania in 1882, did not mention any particular basis for ung. zinci oleatis. He merely said 1 part of the precipitated zinc oleate with 3 parts "of a fatty vehicle" made a suitable ointment. Before that time ointment of oleate of zinc was in use in this country made from the formula suggested by Mr. A. W. Gerrard in 1872. In this formula 2 parts of 20-per-cent. zinc oleate was melted with 1 part each of almond oil and lard.

166/43. *J. P.*—Bromoform.—We are unable to refer you to Denigé's original paper on the manufacture of bromoform. It was published in one of the French chemical journals.

135/33. *A. D.*—Qualitative tests leave us no reason to doubt that the salt you send is cream of tartar; but why not have tested it yourself?

154/70. *H. J. H.*—The Powder for Colouring Polony-skins is safranine.

108/10. *Pro Bono Publico*.—The infallible cure for Red Water in Cattle is compounded as follows:—

|                        |     |     |       |
|------------------------|-----|-----|-------|
| Liq. ammon. acet. ...  | ... | ... | 3iv.  |
| Spt. ætheris nitr. ... | ... | ... | 3i.   |
| Sodii chloridi ...     | ... | ... | 3i.   |
| Aq. ad ...             | ... | ... | 5xxx. |

This mixture is a diuretic, and some veterinarians strongly condemn the use of such mixtures, as the disease is not one of the bladder or kidneys, but of the blood. It is as well to give tonics and stimulants as an addition to the above diuretic mixture.

145/68. *A. R. B.*—(1) Brown-boot Polish.—Refer to *C. & D.*, December 24, 1898, page 1027. (2) Ointment for Boils.—Use ung. hydrargyri co. before the boil has burst, and ung. ac. borici after.

133/30. *Cinnamon*.—The Heading-powder is only powdered quillaia-bark.

163/10. *E. A. T.*—The Paste for Preventing Spectacles from Steaming is soft soap. In this case a white soft soap such as crème d'amande has been used.

129/10. *Disinfectant*.—Disinfecting-powder.—This is made of borax, sodium bicarbonate, and eucalyptus oil. Are you not in error in describing it as odourless?

129/9. *Glaze*.—Prepared Starch.—The sample you send consists of a mixture of starch and borax (about 2 oz. of borax to 16 oz. of starch). We do not detect any of the other ingredients you suppose to be present.

157/31. *Climax*.—(1) The Baking-powder contains acid sulphate of potash. (2) It may be sold as an ingredient of baking-powder as it is not a noxious drug.

165/5. *W. J. B. B.*—The Liquid Depilatory you send consists of solution of ammonium sulphhydrate.

155/33. *Semper*.—(1) Manganese dioxide dissolves in hydrochloric acid. The production of chlorine in this way should be familiar to you. (2) You are in a better position than we are to conduct a series of colorimetric experiments on the addition of permanganate of potash to logwood liquor.



139/9. *Veterinary*.—Your sample of Lamb-drink is a tur-oil emulsion. You do not say how it is used, or what it is for.

150/34. *C. R. S.*—Lotion for Drying Cows.—This is composed of—

|                  |     |     |     |      |
|------------------|-----|-----|-----|------|
| Liq. plumbi ...  | ... | ... | ... | 3ss. |
| Ol. rosmarini... | ... | ... | ... | 5j.  |
| Spirit ...       | ... | ... | ... | 5j.  |

M.

The directions are to mix the above quantity with 1 pint of cold water and rub half of it into the udder, and the rest three days afterwards.

112/72. *C. B. V.*—There is no list published giving the weights of different volumes of oils and varnishes. You could make a list yourself, and, from the sp. gr. of the oils, find the weight of 1 gallon. A gallon of water, with the sp. gr. of 1.00, weighs 10 lbs., so that 1 gallon of cod-liver oil with a sp. gr. of 0.925, would weigh 9½ lbs.

145/44. *Sulph. Sub.*—(1) The ointment does not appear to be of sufficient interest to warrant us analysing it. (2) Healthy hair cannot be prevented from becoming glossy: it is part of the function of the hair to secrete grease. (3) Calf vaccine is supplied by "The Association for the Supply of Pure Vaccine Lymph" and Faulkner's Institute (see 1900 DIARY for addresses). (4) Sanitas seems to be the disinfectant which is preferred for mortuary chambers.

143/74. *Chemist*.—(1) The Liniment is best compounded by first dissolving the soap in a pint of boiling water, and when cold adding the turpentine gradually, stirring all the while in a mortar. Transfer the mixture to a bottle, and add with constant shaking the rest of the water in which the sal ammoniac has been dissolved. (2) Spirit-soluble Caramel is prepared by macerating solid caramel in spirit, when from 12 to 17 per cent. dissolves; the liquid is filtered and the spirit recovered.

145/48. *Vetox.*—(1) Lanoline Toilet-cream. — The following formula may suit you better than the one you have been using:—

|                   |     |     |     |      |
|-------------------|-----|-----|-----|------|
| Pulv. tragac. ... | ... | ... | ... | 5ij. |
| Alcohol ...       | ... | ... | ... | 5ss. |
| Lanolini ...      | ... | ... | ... | 5j.  |
| Glycerini ...     | ... | ... | ... | 5ij. |
| Aque ...          | ... | ... | ... | 5vj. |

Mix the tragacanth with the alcohol in a mortar and stir in the water all at once. Separately mix the lanoline and glycerin, and add to it the tragacanth mucilage in small quantities at a time. As a perfume a mixture of ol. rosæ geran. mxx., and ol. amygd. ess. miv. is suitable.

Another form of lanoline-cream consists of a mixture of lanoline and white paraffin, equal parts. (2) We are not aware that any proprietary rights in the title "Lanoline toilet-cream" are claimed.

156/26. *Caput*.—The treatment for "blister-pox" is a saline mixture containing liq. ammon. acet. and potass. citr. internally. Locally apply a bland ointment such as ung. ac. borici, and when the eruption has dispersed a course of chemical food should be given.

137/24. *J. W. H.* — Carbolised Resin, temporary stopping for teeth:—

|                  |     |     |     |        |
|------------------|-----|-----|-----|--------|
| Ac. carbol. ...  | ... | ... | ... | 5ij.   |
| Camphor. ...     | ... | ... | ... | 5j.    |
| G. mastic. ...   | ... | ... | ... | 5j.    |
| G. sandarac. ... | ... | ... | ... | 5j.    |
| Chloroform. ...  | ... | ... | ... | 5j.    |
| Alcohol ...      | ... | ... | ... | 5iiss. |

A piece of cotton-wool saturated with carbolised resin is inserted in the dried cavity of the tooth.

167/19. *Nemo*.—(1) *Union Pharmaceutique*, 7 Rue de Jouv, Paris, may suit you. (2) For information in regard to situations in France see *C. & D.*, February 24, 1900, page 342, and April 23, 1900, page 697. English assistants are regularly engaged through wholesale houses for the Riviera season beginning about October, and advertisements appear in our weekly supplement from time to time.

163/36. *Dispenser*.—You should either platinise or gild the wire which you desire to be unacted on by strong sulphuric acid.

135/24. *A. T. D.*—French Polish.—(1) For best work:—

|              |     |     |     |          |
|--------------|-----|-----|-----|----------|
| Shellac ...  | ... | ... | ... | 3xx.     |
| Mastic ...   | ... | ... | ... | 3ij.     |
| Sandarac ... | ... | ... | ... | 3vj.     |
| Elemi ...    | ... | ... | ... | 3ss.     |
| Spirit ...   | ... | ... | ... | Cong. j. |

Dissolve and strain.

(2) For second-class work:—

|             |     |     |     |       |
|-------------|-----|-----|-----|-------|
| Shellac ... | ... | ... | ... | 3xvj. |
| Benzoin ... | ... | ... | ... | 3ss.  |
| Spirit ...  | ... | ... | ... | Oiv.  |

Dissolve and strain.

135/1. *College*.—The Educational Number of THE CHEMIST AND DRUGGIST (September 8, 1900) gives you the names of the Entrance examinations required before entering for the Minor. The Secretary of the College of Preceptors, Bloomsbury Square, W.C., will send a syllabus of the College exams, if you ask him.

223/38. *Photo*.—Pyro-stain Remover.—Ammonium persulphate gradually decomposes in solution, a sulphate being formed and oxygen liberated, so that you could not sell the solution as a pyro-stain remover. A strong solution of citric acid containing glycerin as a preservative is about the most convenient stain-remover to bottle.

160/53. *Boer*.—(1) Nickel is deposited on the metal parts of cycles electrolytically. No simple immersion-process is of any use. The nickeling-bath is composed of a solution of either the double sulphate or chloride of nickel and ammonium; the anodes are cast nickel, and either a battery or dynamo is the source of the electricity. (2) Brown-boot Polish.—You will find a formula for this in the *C. & D.*, December 24, 1898, page 1027, and others in "Pharmaceutical Formulas," page 329. When brown boots have become dark through much polishing they can be partly restored by dissolving off the old polish by means of benzin and repolishing.

145/35. *Tap*.—Nickelling Brass Goods.—See reply to "Boer."

108/24. *B. L. B.* (Calcutta).—(1) Books on British Industries.—Cassell's "Great Industries of Great Britain," 3 vols. (22s. 6d., Cassell), Smith's "British Hive and its Working Bees" (3s. 6d., Isbister), and Bevan's "British Manufacturing Industries," 12 vols. (42s., Stanford). (2) Stimulant Hair-oil for Oriental trade:—

|                        |     |     |     |       |
|------------------------|-----|-----|-----|-------|
| Oil of sandalwood ...  | ... | ... | ... | 5j.   |
| Oil of verbena ...     | ... | ... | ... | mxxx. |
| Oil of cassia ...      | ... | ... | ... | 5j.   |
| Oil of cantharides ... | ... | ... | ... | 5j.   |
| Peach-kernel oil ...   | ... | ... | ... | Oj.   |

Mix.

The oil of cantharides is made by digesting 1 oz. of coarsely-powdered cantharides in 8 oz. of olive oil in a water-bath for six hours, straining, pressing, and filtering.

157/18. *A. A.*—Ice-cream.—The basis of ice-cream is either a custard (made of four eggs, 3 oz. sugar, and a pint of milk), a starch (cornflour or arrowroot), jelly, or a gelatin solution. By the use of various flavourings and colourings added before freezing, any desired ice-cream may be produced.

### Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

170/16. *L. M. P.*—Manufacturers of round wooden boxes for posting-purposes, preferably with screw-top.

177/48. Chipped buffalo-hide used for stiffening hats: where obtainable in 14-lb. quantities?

179/14. *A.*—Manufacturers for the trade of rubberless elastic bandages.

## Trade Report.

**NOTICE TO BUYERS.**—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: September 13.

**T**HERE are better reports of business in Mincing Lane this week, and there has been a fair amount of activity in certain lines of drugs and chemicals. Cinchona and quinine are again the features of the week, and a considerable speculative business has been done in the sulphate at higher prices, but so far no official advance has been made. Chamomiles are again easier, and fine flowers are practically unobtainable. The advance in cocaine last week has stimulated business, and several second-hand holders have sold fair quantities. Elaterium has about doubled itself in price owing to first-hand stocks having been bought up, and American peppermint oil is tending firmer, as reports concerning the short crop are confirmed. Opium is quiet here, though Smyrna is fairly active; the new Turkey crop continues to arrive freely, but in poor condition. Quicksilver was reduced 2s. 6 $\frac{1}{2}$  last week, but no alteration has been made in mercurials, and thymol has again advanced. The drug-auctions are reported on page 488. The following table indicates the changes of the week:—

| Higher                                                                                                                                                                                     | Firmer                            | Easier                                                                          | Lower                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Balsam<br>Canada<br>Canary-seed<br>(fine)<br>Chamomiles<br>Cinchona<br>Coriander<br>Elaterium<br>Golden seal<br>Guarana<br>Oil, turpentine<br>Quinine (second<br>hand)<br>Senega<br>Thymol | Balsam Peru<br>Cascara<br>sagrada | Aloes, Curaçao<br>Cardamoms<br>Ginger (Jam.)<br>Mace<br>Oil, anise<br>Petroleum | Aloes, Cape<br>Ammonia<br>sulphate<br>Ipecacuanha<br>Nux vomica<br>Quicksilver |

### Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom from September 6 to 12, both inclusive:—Aloes (Cape), 20; aniseed (Span.), 20; arsenic, 30; benzoin, 8; camphor oil, 5; cardamoms, 55; castor oil (E.I.), 832; chamomiles, 105; citronella oil, 62; cinchona (E.I.), 250; cod-liver oil, 644; coriander-seed, 100; croton-seed, 5; dragon's blood, 13; eucalyptus oil, 118; galls, (Chin.) 50, (Smyrna) 75; gum arabic, (E.I.) 30, (from Alex.) 252, (Trieste) 4; honey (Aust.) 60; iodine, 9; lemon-juice, 20; liquorice-paste, 100; opium, 501; rhubarb, 101; saffron, 2; senna (Tiny.), 224; soy (Chin.), 291; star-aniseed oil, 10; tamarinds (E.I.), 54; turmeric, 90, (Chin.) 57; wax, bees' (Mor.) 15, (W.C.A.) 15, (Natal) 18; wax (Jap.), 100; wax, carnauba, 472.

### Japanese Iodine.

(From our Yokohama Correspondent)

At the beginning of the year the market-tone of all Japanese iodine-preparations was quiet all round, and up to the end of February the quotations were 3.80 yen per lb. for potassium iodide, 3.70 yen for crude iodine, and 5.20 yen for iodoform.

Since then, however, quotations were advanced by nearly 60c., or 15 per cent., owing to the good demand from both at home and abroad, but in May these advanced prices were reduced on account of the appearance of the new crop from the

interior, and the present quotations are 3.60 yen per lb. for potassium iodide and 3.50 for crude iodine. On the other hand, the price of iodoform has advanced again owing to the active demand from the Government; at present 6 yen is generally quoted. However, it must not be forgotten that the foreign-made iodides are a power to be reckoned with on the Japanese market, and at the date of writing (August 16) potassium iodide is selling at 2.80 yen per lb., under the stipulated conditions of business by which the purchasers bind themselves to buy all chemicals from the syndicate's agent.

It is a matter for congratulation, however, that the Japanese are enabled to buy cheaper iodides from foreign importers, while at the same time they are selling a considerable quantity of their home-made production in European and other markets abroad. The following table shows the imports and exports of iodides from Japan during the first half of the present year:—

| —                     | Imports | Exports |
|-----------------------|---------|---------|
|                       | Lbs.    | Lbs.    |
| Pot. iodid. ... ..    | 20,000  | 8,680   |
| Iodoform ... ..       | 3,028   | 300     |
| Iodine, resub. ... .. | 900     | —       |
| Iodine, crude ... ..  | —       | 10,300  |

The exports are valued at about 70,000 yen, and the imports at 81,500 yen, 2.80 yen per lb. being taken as the basis of calculation for the potassium iodide. Cables from Europe announce that the price of iodine and iodide preparations have been reduced by 6 per cent., so that it is probable that the price of Japanese iodine may be lowered to such an extent as will warrant European buyers to support the Japanese market. The iodine industry in Japan is progressing year by year, and it is within the bounds of possibility that at no remote date the European Convention may be obliged to release their hold to a great extent on the Japanese market.

### Heavy Chemicals.

[These prices are for market-centres other than London.]

At all the principal centres of the heavy-chemical market a continued quietness is still the main feature to be reported. Home-trade requirements are only moderate, and shipments are also light. Inquiries for next year's deliveries continue to come in freely, but so far not much actual business has been transacted.

**ALKALI PRODUCE.**—Products under this heading remain for the most part without change, and recent quotations still rule. Caustic soda is still very firm and is moving freely. Similar remarks apply to ammonia alkali, soda ash, and hyposulphite of soda. Bleaching powder keeps on the easy side. Soda crystals steady and unchanged. Salt-cake and chlorates of potash and soda quiet. Yellow prussiate of potash tends firmer again.

**BENZOLS** are steady, 90-per-cent. at 10*d.* to 10 $\frac{1}{2}$ *d.*, and 50-per-cent. 11*d.* to 11 $\frac{1}{2}$ *d.*

**SULPHATE OF AMMONIA** still keeps very quiet, and ruling quotations are again a shade lower. Exports from Leith last week amounted to 940 tons.

**SULPHATE OF COPPER** has declined since last reported. Liverpool is now quoted 24*l.* 5*s.*, and forward 24*l.* 10*s.* per ton.

**BORAX** keeps very firm, and is somewhat scarce.

**LINSEED AND COTTONSEED CAKES** continue in good demand, and prices rule a trifle higher. Linseed, 95-per-cent., pure, 8*l.* 5*s.* to 8*l.* 10*s.* per ton; oil-cakes, 7*l.* 5*s.* to 7*l.* 10*s.* per ton; cotton-cakes, best makes, 4*l.* 7*s.* 6*d.* to 4*l.* 12*s.* 6*d.* per ton, and seconds 4*l.* 2*s.* 6*d.* to 4*l.* 7*s.* 6*d.* per ton.

**ALUMINA-PRODUCTS** are in fair request, and prices are firm with advancing tendency. White sulphate of alumina, purest makes, practically free of iron, 85*s.* to 90*s.* per ton, in casks, free on rails, with customary allowances for bags or loose slabs. Crystal alum very firm, loose lump 4*l.* 12*s.* 6*d.* to 4*l.* 17*s.* 6*d.* per ton, lump in tierces 4*l.* 17*s.* 6*d.* to 5*l.* 2*s.* 6*d.* per ton, and ground in bags 5*l.* 5*s.* to 5*l.* 10*s.* per ton. Sewage alum, 47*s.* 6*d.* per ton. Aluminous ferric, 45*s.* to 47*s.* 6*d.* per ton. Aluminous cake, 52*s.* to 52*s.* 6*d.* per ton. Hydrate of alumina, purest quality and highest percentage, 11*l.* 5*s.* to 11*l.* 15*s.* per ton, in large casks. Carbonate of alumina, 35*s.* to 37*s.* 6*d.* per cwt. Chloride-of-alumina solution, 11*l.* 10*s.* to 12*l.* 5*s.* per ton, free on rails, in barrels. Bauxite, 60-per-cent. alumina, 17*s.* to 18*s.* per ton, f.o.b. Aluminate of soda, highest percentage Al<sub>2</sub>O<sub>3</sub>, 37*s.* 6*d.* to 40*s.* per cwt., according to quantity and packages.

### German Drug Market.

Hamburg, September 11.

Business on our drug-market is quiet in general, and there are but few articles which meet with interest from the buyers.

AGAR-AGAR is quiet at 39*sm.* per 100 kilos.

ALOES.—Cape is also quieter at 53*sm.* per 100 kilos.



BALSAM PERU is slow of sale owing to new arrivals, and is quoted 11½m. per kilo.

CAMPHOR.—Refined is steady, but in slight demand at 470m. per 100 kilos.

CONDURANGO-BARK.—Some small arrivals are expected here in a few days; the quotation is 310m. per 100 kilos.

CUMIN-SEED is very firm. Malta is quoted 60m., and Mogador 54m. to 55m. per 100 kilos.

COCAINE has advanced 100m. per kilo.; first-hand is now 700m. to 720m. per kilo., according to quantity. In second-hand 690m. per kilo. has been paid.

COCA-LEAVES are firmer at 400m. per 100 kilos.

ERGOT OF RYE is quiet, although there has again been some inquiry to-day. Some small lots here are held for 310m. per 100 kilos.

LYCOPODIUM.—The stocks here do not seem large; spot delivery is quoted 430m. per 100 kilos., while 410m. has been paid. Forward delivery is quoted 380m. per 100 kilos.

MENTHOL is very firm and scarce; 23m. per kilo. has been paid and 23½m. is now asked.

QUININE is unchanged at 51m. per kilo.

SANTONIN is very firm, and second-hand parcels appear to be non-existent.

STAR ANISE is quiet at 180m. per 100 kilos.

JAPANESE WAX firm at 64½m. per 100 kilos.

CASTOR OIL is steady at 63½m. per 100 kilos. for first-pressing. Cod-liver unchanged at 10m. per barrel. Linseed oil advancing, and cotton oil is dearer.

In essential oils caraway-seed and carvol oil are advancing, but others are unchanged.

### American Drug Market.

*New York, September 4.*

The drug-market remains quiet, with a steady undertone. The coming presidential election has not as yet affected business, and the indications are that in the absence of any tariff-issue business men will pay but little attention to the outcome. Preparations are already being made for an expected lively autumn trade.

BUCHU-LEAVES are more active, and supplies are being concentrated. Short are quoted 18c. to 20c. per lb., with 22c. asked for prime green leaves. Long are offered at 20c. to 24c. The tendency is upward.

ACIDS.—Carbolic has advanced to 24c. per lb. in bulk. Spot supplies are light. Citric is selling at 38c.

BALSAMS.—Copaiba is quiet, at 34c. for Central American and 40c. for Para. Peru is in better demand, and \$1.30 is asked. Canada fir is in light supply, and \$2.50 is generally asked. Some lots are obtainable at \$2.40.

CASCARA SAGRADA is firmer, both on the spot and on the Pacific Coast. The new crop will not be very large, and prices are not likely to be much lower. At present 4½c. to 7c. is asked, according to age and quality.

BEESWAX is in light supply, and prices are very strong at 30c. to 33c. per lb.

CAMPHOR has sold freely up to 60c. per lb., and manufacturers now ask 60½c. Japanese is very scarce.

CANTHARIDES.—Russian is firm at 52½c., and Chinese at 48c. to 55c.

COCA-LEAVES.—Spot supplies are light, and recent arrivals have not affected the market. Truxillo are strongly held at 22c. to 24c., and Huanuco at 32c. to 33c.

COD-LIVER OIL has advanced \$1 per barrel.

CONDURANGO is higher in sympathy with Hamburg; 28c. to 30c. is asked.

CUBEBS are in small supply on the spot, and 15c. to 16c. is generally asked. Small lots are available at 14c.

DAMIANA-LEAVES are easier at 8½c. to 9c.

ERGOT is easier. German is offered at 45c., and Spanish at 65c.

GOLDEN-SEAL ROOT (HYDRASTIS) is firmer, owing to the small size of the new crop. Spot prices are 55c., and an upward movement is expected.

JALAP is selling at 13c. to 14c. per lb.

MANNA is very scarce. Small flake is quoted at 35c., and large flake at 65c. to 70c. Sorts are higher at 27c.

MENTHOL is strong at \$2.65 per lb.

OPIMUM is dull, and single cases are offered at \$3.27½. In quantity \$3.25 will buy.

QUININE.—Manufacturers quote 37c. in bulk, and second-hands offer at 36c. Java is obtainable at 34½c.

SARSAPARILLA.—Mexican is firmer at 8c. to 8½c.

SENEGA is hardening, and prices moving upward. Spot supplies are held at 34c. to 35c., and holders are not anxious sellers at this figure. There is considerable demand for export, but buyers are not willing to pay the price asked. There is little probability of much lower prices prevailing for reasons indicated some weeks ago.

### Japanese Market.

*Yokohama, August 16.*

Although the general condition of foreign trade is still very dull, owing to the scarcity of money, a rather active business is being done so far as drugs and chemicals are concerned, and there have been a good many important changes in both import and export articles. A considerable quantity of drugs have been bought by the Government on account of the present trouble in China, and foreign naval agents have also bought in the Japanese market.

In export articles peppermint oil has advanced considerably, and now the general quotation is 2.10 yen per lb. This advance was chiefly due to the active demand from Europe. There has also been a substantial advance in menthol, and a considerable quantity was turned over about the middle of July, when the market was not so high as at present, such business being done at prices ranging from 4.70 yen to 5 yen per catty. From July up to the present time not less than 15,000 catties of menthol and peppermint oil were exported to Europe and the United States. Market is very firm now at 5.50 yen per catty for export crystals with a further upward tendency. Ginger is also firmly held at 12.40 yen to 12.50 yen. About 700 piculs were sold before the advance at 12 yen for Bombay. The export merchants have a good many orders on hand from Europe and India, which they are anxious to execute, but holders do not want to sell, as stock is decreasing considerably in Yokohama and the producing-districts. At present no important changes have taken place in iodides; the present quotation is 3.60 yen per lb. for potassium iodide and 3.50 yen for crude iodine, with an easier tendency, which is provable, owing to cable advice from Europe. On the other hand, iodoform is dearer on account of increased demand, which is strengthened by scarcity of spot stock; 6 yen per lb. is generally quoted. Sulphate of copper is quoted at 15.50 yen per picul, and for bleaching-powder 5.75 yen per 100 lbs is asked, manufacturers having advanced their quotation owing to increased cost of manufacture.

### Cablegrams.

HAMBURG, September 13, 12.54 P.M.—Refined camphor in second-hands is quiet at 470m. per 100 kilos. Cocaine and santonin are firm. Lycopodium is selling at 420m. per 100 kilos.

\* \* \* \*

NEW YORK, September 13, 3 P.M.:—This market is steady. Opium is weak at \$3.23 per lb. Quinine is hardening, the price to-day being 37c. per oz., and cinchonidine has advanced to 31c. Senega is in a strong position at 35c. per lb. Golden-seal root is 60c. and advancing. Coca-leaves are higher at 24c. per lb. Good business in jalap this week at 13c. Cocaine hydrochloride has advanced by 75c. per oz.

### London Markets.

ACID, CITRIC, has a firmer tendency, there being no sellers under 1s. 4½d. in second-hands, owing, no doubt, to the higher prices quoted for juice.

ACID SALICYLIC is unchanged, the syndicate still refusing to sell more than ½-ton lots for forward delivery.

ARROWROOT quiet. On Wednesday a few lots of good St. Vincents sold at 3d. per lb., ordinary quality being bought in at 2d. to 1½d. per lb.

BALSAM CANADA is dearer in consequence of small crop 1s. 5d. per lb. c.i.f. is quoted.

CAMPHOR.—More attention has been paid to crude this week, and business is reported to have been done at 178s. 6d. per cwt. c.i.f. to arrive for Chinese, and at 197s. 6d. c.i.f. for half-refined. An advance was anticipated in German refined on Wednesday.

CHAMOMILES.—Have again considerably advanced, and a good business has been done at from 85s. to 90s. per cwt. for fair white flowers, while inferior can be had at 75s. From Belgium very little is offered under 90s. to 98s., London terms.

CINCHONA.—At the London auctions on Tuesday seven brokers brought forward supplies amounting to 2,532 packages, the bulk of which was disposed of at or after the sale at considerably dearer rates. There was a keen competition for some of the high-testing parcels, and the demand throughout was excellent, the average unit obtained for

manufacturing bark being  $2\frac{1}{2}d.$ , against  $2\frac{5}{8}d.$  last sale. For cinchonidine barks the unit was about  $2\frac{3}{4}d.$

The following table shows the quantity of bark offered and sold:—

|                            | Packages<br>Offered. | Packages<br>Sold. |
|----------------------------|----------------------|-------------------|
| South American bark ... .. | 1,265                | of which 765      |
| East Indian bark ... ..    | 831                  | " 660             |
| Ceylon bark ... ..         | 290                  | " 238             |
| Java bark ... ..           | 176                  | " 141             |
|                            | 2,562                | 1,804             |

The following were the approximate quantities of bark purchased by the principal buyers:—

|                                          | Lbs.    |
|------------------------------------------|---------|
| American and Italian factories ... ..    | 85,635  |
| Frankfort and Stuttgart factories ... .. | 64,110  |
| Mannheim and Amsterdam factories ... ..  | 59,140  |
| Messrs. Howards & Sons ... ..            | 42,156  |
| Brunswick factory ... ..                 | 36,130  |
| Imperial factory ... ..                  | 16,546  |
| Total quantity sold ... ..               | 303,717 |
| Bought in or withdrawn ... ..            | 160,090 |
| Total quantity offered ... ..            | 463,807 |

The prices paid for sound bark were as follows:—

JAVA.—Ledgeriana, stem chips,  $7\frac{1}{2}d.$  to  $1s.$   $5\frac{3}{4}d.$ ; good branch,  $10\frac{3}{4}d.$  to  $1s.$   $2\frac{1}{2}d.$ ; bold quill,  $9\frac{1}{2}d.$ ; and crushed root,  $5\frac{1}{2}d.$  per lb.

SOUTH AMERICAN.—Bolivian cultivated Calisaya, good to fine quill,  $1s.$   $2\frac{3}{4}d.$  to  $1s.$   $5d.$ ; and good flat Calisaya,  $10\frac{3}{4}d.$  to  $1s.$   $4\frac{3}{4}d.$  Soft Colombian, of old import,  $5d.$  to  $7d.$ ; and low mixed chips,  $1\frac{3}{4}d.$  to  $1\frac{1}{2}d.$

CEYLON.—Succirubra, stem chips and shavings,  $3\frac{3}{4}d.$  to  $4\frac{3}{4}d.$ ; renewed ditto,  $5\frac{1}{2}d.$  to  $5\frac{3}{4}d.$  per lb. Officialis, good natural stem chips,  $7d.$ ; and good Hybrid stem and root chips,  $7d.$  per lb.

EAST INDIAN.—Officialis, stem chips and shavings,  $8\frac{3}{4}d.$  to  $1s.$   $0\frac{3}{4}d.$ ; fair,  $4d.$  to  $4\frac{3}{4}d.$ ; and common dark,  $2\frac{3}{4}d.$  to  $2\frac{1}{2}d.$ ; renewed ditto,  $6d.$  to  $1s.$   $2\frac{5}{8}d.$ ; and good root,  $1s.$   $0\frac{3}{4}d.$  Red stem chips and shavings,  $3\frac{3}{4}d.$  to  $9d.$ ; renewed ditto,  $4\frac{3}{4}d.$ ; and fair root,  $4d.$  to  $4\frac{1}{2}d.$  per lb.

The total weight of the 3,211 packages to be offered in Amsterdam is 288,149 kilos., divided as follows:—Ledgeriana, 193,650 kilos.; Succirubra, 47,687 kilos.; Hybrid, 38,046 kilos.; Officialis, 3,790; and Calisaya, 4,770 kilos.

In the drug-auctions 5 cases of red bark sold at from  $6d.$  to  $1s.$

COCAINE.—One box containing  $226\frac{1}{2}$  oz. of crude sold at  $13s.$  per oz. in auction.

CREAM OF TARTAR.—Quiet. Best French white crystals are quoted  $75s.$  per cwt., and powder,  $77s.$ ; 98 per cent. is  $79s.$

ELATERIUM.—Prices in Malta have considerably advanced owing to heavy purchases having recently been made on behalf of the Continent and elsewhere, and the stock has been practically cleared. In London the stock is estimated at about 100 oz., which is held for very high rates—viz., about  $2s.$  per oz. This drug, which appeared to be gradually falling into disuse, had been offered at a nominally low figure, and had even fallen to  $1s.$  previous to the advance.

GOLDEN SEAL.—At the end of last week autumn-dug root was advanced by one holder to  $2s.$   $8d.$  per lb. spot, but there are still sellers at  $2s.$   $6d.$

GUARANA is a very scarce article, and quotation has lately advanced to  $2s.$  per lb. spot.

IODINE.—According to official statistics published by the Chilean Government, last year's production amounted to 222,354 kilos. (222 tons) and the exports to 273,586 kilos. Under the combination for the restriction of output and the maintenance of an artificial price, only twenty-one nitrate-factories out of fifty-eight at work were allowed to make iodine. The stocks on December 31 were 870,000 kilos. equal to nearly three years' consumption at the 1899 rate of 319,562 kilos.

KOLA.—In the spice auctions, seven packages of green West Indian sold at from  $1d.$  to  $6d.$  per lb.

MENTHOL.—The market is quiet, Kobayashi brand being held for  $10s.$   $3d.$  per lb. spot.

OIL, ANISE-STAR.—Quiet. There are spot-sellers at  $6s.$   $2d.$  to  $6s.$   $3d.$  per lb.

OIL, CASTOR.—Belgian, of first pressing, still keeps very firm and scarce on the spot, at  $33s.$   $6d.$  per cwt. Hull make has been advanced to  $4\frac{3}{16}d.$  per lb. for medicinal in cases; and first pressing in barrels to  $32l.$   $15s.$  per ton, and  $3\frac{3}{16}d.$  per lb. in cases.

Calcutta advices, dated August 23, report that stocks and production, especially of fine qualities, continue small. There is a fair business doing for near and forward delivery at unchanged rates.

OIL, COD LIVER.—Our Bergen correspondent writes on September 9 that the market is easy, and although buyers do not seem to be in want of oil, the tendency among holders is towards maintaining present rates, that for best Lofoten non-congealing oil being  $76s.$  per barrel f.o.b. Bergen. The exports from Bergen to date amount to 5,839 barrels against 9,245 barrels at the corresponding period of last year.

OIL OF LEMON has continued to rise in Messina, and several parcels have changed hands at a price equal to  $4s.$   $6d.$  per lb. English, c.i.f. London. Bergamot is  $10s.$  per lb. c.i.f.

OIL, PEPPERMINT.—Japanese dementholised is quoted  $3s.$   $7\frac{1}{2}d.$  to  $3s.$   $9d.$ , and 40 per cent.  $6s.$  per lb. spot. For genuine "Wayne County" oil  $4s.$  is wanted, and lower grades are quoted  $3s.$   $4d.$  to  $3s.$   $6d.$ . One importer of American H.G.H. has advanced his quotation to  $5s.$   $3d.$  spot.

OIL, SASSAFRAS.—American of genuine quality is quoted  $1s.$   $7d.$  spot.

OIL, TURPENTINE.—A decided change for the better has taken place since our last, and the market has been excited at times. Buyers have freely come forward, but sellers at once withdrew, the result being a substantial advance. American spot is now worth  $29s.$  per cwt.

OPIMUM.—The London market is quiet and unchanged. No business is reported in Persian,  $14s.$  being the nominal quotation on the spot, or  $13s.$   $6d.$ , c.i.f., to arrive.

SMYRNA, August 31.—The transactions for the week amount to 60 cases, as follows:—Eighteen cases new current talequale at the equivalent of  $8s.$   $8d.$  per lb., c.i.f.; 12 cases various at  $9s.$  to  $9s.$   $5d.$ ; and 30 cases Karahissar (on account of the Dutch Government) at  $9s.$   $5d.$ . The quality of the new opium is improving from day to day both as regards colour and morphine-content, but the paste continues very soft. The Anatolians say that the opium will continue to be soft throughout the season, and that it will be difficult to fulfil orders with dry goods. The sales during August amounted to 200 cases, 60 of which have been taken for account of the Dutch Government. The arrivals to date amount to 2,690 cases, against 1,487 at same period last year, and in Constantinople up to August 25 1,889, against 797 in 1899. The stock of old and new opium consists of 2,605 cases, against 2,175 at same date last year; and in Constantinople 1,103, against 650 in 1899.

CONSTANTINOPLE, September 8.—The market keeps quietly steady, and no change in price is reported save as regards soft grades, which are slightly firmer. The fortnight's sales amount to 37 cases soft, at  $9s.$  to  $9s.$   $7d.$  per lb., f.o.b.; 4 cases Gueves, at  $8s.$   $4d.$ ; and 2 cases Karahissars, at  $8s.$   $9d.$  per lb. The arrivals of new crop to date would point to a yield of over 8,000 cases. This year, however, goods have come down much quicker than usual, and too much reliance must not be placed on calculations based on arrivals. An 8,000-case yield, however, appears certain.

PODOPHYLLUM-ROOT is quoted  $24s.$  per cwt., spot.

QUEBRACHO.—The export of quebracho-wood to Europe and the United States from the port of Colastiné, on the Paraná, Southern Brazil, is rapidly increasing; during the week ending August 18, 8,000 tons were shipped.

QUICKSILVER.—The importers reduced their quotation by  $2s.$   $6d.$  per bottle on September 7, and now ask  $9l.$   $2s.$   $6d.$

The exports from Spain for the six months ended June were:—

|             | 1900      | 1899       | 1898    |
|-------------|-----------|------------|---------|
| Kilos. ...  | 1,702,039 | 2,959,982  | 48,068  |
| Pesetas ... | 9,191,000 | 15,984,000 | 260,000 |

From Italy for the same period the exports were:—

|            | 1900    | 1899    | 1898    |
|------------|---------|---------|---------|
| Kilos. ... | 96,100  | 138,000 | 113,300 |
| Lire ...   | 529,000 | 759,000 | 540,000 |

QUININE.—This has been a busy week in the second-hand market, and the quotation on the spot has advanced  $\frac{1}{2}d.$  per oz. up to Wednesday. This revival of speculation is, no doubt, due to the higher unit obtained at the bark-auctions, as on Wednesday a considerable second-hand business was done approximated at 100,000 oz.,



up to 1s. 6 $\frac{1}{2}$ d. being paid for spot; October, 1s. 6 $\frac{1}{2}$ d. to 1s. 7d., and 1s. 7 $\frac{1}{2}$ d. for December, and Zimmer, at 1s. 6 $\frac{1}{2}$ d. The Imperial brand has been advanced  $\frac{1}{2}$ d., to 1s. 6d. per oz. To-day, still higher prices have been paid and a good business done.

The shipments from Java for June were 5 cases only. From July 1 to June 30 (twelve months) the shipments have been:—

| Cases | 1899-1900 | 1898-99 | 1897-98 |
|-------|-----------|---------|---------|
| ...   | 1,352     | 1,619   | 458     |

The following are the dates fixed for the remainder of the quinine-auctions to be held in Batavia this year:—September 26 (4,000 kilos.), October 31 (4,000 kilos.), November 28 (4,000 kilos.), and December 19 (3,200 kilos.).

**SAFFRON.**—Valencia is quoted from 35s. 6d. to 38s. per lb., London terms. There is as yet no definite news as to the coming crop.

The exports from Spain for the six months ended June were:—

| Kilos.  | 1900      | 1899      | 1898      |
|---------|-----------|-----------|-----------|
| ...     | 37,010    | 26,320    | 94,206    |
| Pesetas | 9,421,000 | 2,632,000 | 3,701,000 |

**SCAMMONY-ROOT.**—Fair quality can be had at 30s. per cwt.

**SEEDS.**—Russian *Anise* is steady at 20s. 6d. per cwt. *Coriander* dearer for Morocco at 10s. 6d. to 12s. per cwt., but no demand for Russian. *Cumin* very slow of sale, but quotations are unchanged. *Canary* steady for Turkish at 33s. per quarter, but fine seed is scarce and dearer. *Caraway* maintains its price. *Linseed* is held for 60s. to 65s. per quarter for fine descriptions. *Penugreek* quiet at 5s. 6d. to 6s. per cwt.

**SENEGA** has advanced another 1d. per lb., 1s. 8d. spot now being quoted for Western.

**SHELLAC.**—The small supply offered in auction was chiefly bought in, about 70 cases selling of 300 odd offered. Second orange, ordinary blocky, sold at 55s.; good worked orange, blocky, 60s.; fine pale, 67s.; Bombay red, 57s. to 58s.; and blocky Button thirds, 52s. per cwt. A steady trade is doing privately on the spot at 59s. for fair TN.

**SPERMACELE.**—American refined is quoted 1s 3 $\frac{3}{4}$ d. to 1s. 4d. per lb., spot, according to quantity.

**SPICES.**—Only a moderate business has been done in spices this week. The auctions on Wednesday were larger than usual, but a large proportion of the goods offered failed to find buyers. *Cochin (Finger)* was in little demand, only a few lots selling, fine bold cut at 100s. per cwt., medium at 60s., fair washed rough at 31s., good wormy at 29s. cuttings at 28s., and scrag at 25s. 6d. to 26s. Calicut brown rough was bought in at 31s. to 33s. per cwt. Jamaica partly sold at slightly easier rates, common at 34s. to 38s., and good at 52s. per cwt. Zanzibar *Cloves* steady, barely fair sold at 3 $\frac{3}{4}$ d. per lb., and fine at 4d. per lb.; fine Penang brought 1s. per lb., and fair ordinary 8d. per lb. Fine *Chillies* were in request, Nyassaland sold at 53s., Japan at 47s., and Zanzibar at 43s., fair being bought in at 38s. per cwt. *Capsicum* were all bought in at 25s. to 30s. per cwt. *Pimento* partly sold at 3 $\frac{1}{4}$ d. per lb. for common, at 3 $\frac{3}{4}$ d. for ordinary, and at 3 $\frac{1}{2}$ d. for good. *Cinnamon* sold at 1s. 3d. per lb. for good thin, and at 3 $\frac{1}{4}$ d. for chips. *Mace* sold at 1s. 3 $\frac{1}{2}$ d. per lb. for pickings, and at 1s. 10d. for good pale. East India *Cassia-vera* sold at 22s. per cwt., Japan being bought in at 24s. per cwt. *Pepper* steady; Singapore black is quoted 6 $\frac{1}{2}$ d. per lb. on the spot, and 6 $\frac{3}{4}$ d. for October-December shipment. Singapore white has been sold at 9 $\frac{1}{2}$ d. per lb. for same shipment; Penang was bought in at 8 $\frac{1}{4}$ d. per lb.

**SUGAR OF MILK.**—American powder is quoted 52s. per cwt., spot, for firsts, and 47s. 6d. for seconds.

**THYMOL.**—One maker now quotes 15s. 6d. per lb., without engagement, and another is supposed to be without stock. There is a little here in second-hands which might be obtainable at 15s.

**TRAGACANTH.**—Quiet, with few inquiries except for Bagdad qualities between 10l. and 12l. per cwt., and fine siftings, both of which qualities are scarce.

**WAX, CARNAUBA.**—Further large arrivals are reported in Liverpool, and sales of 40 bags Pernambuco and Ceara grey have been made at 60s. to 62s. 6d.; 15 bags good medium Ceara at 70s.; and a small lot of prime yellow at 82s. 6d. per cwt.

## London Drug-auctions.

The auctions to-day consisted of "old and new goods," and embraced practically all the staple crude drugs which are offered publicly.

The tone was very poor, and only a small proportion of the goods sold. Cape aloes was 1s. per cwt. lower, and a parcel of livery Curacao in boxes also sold cheaply. Rio ipecacuanha was about 2d. to 3d. lower; balsam tolu was a shade cheaper, and so was nux vomica; cardamoms were easier and senna was very firm.

The following table shows the number of original packages offered and sold:—

|                      | Offered | Sold |                     | Offered | Sold |
|----------------------|---------|------|---------------------|---------|------|
| Albumen .....        | 10      | 0    | Honey—              |         |      |
| Aloes (Cape) .....   | 51      | 20   | New Zealand ..      | 14      | 14   |
| Curacao (gourds)     | 529     | 529  | Ipecacuanha—        |         |      |
| (boxes) .....        | 169     | 99   | (Cartagena) .....   | 62      | 0    |
| Socotrine .....      | 10      | 5    | (Rio) .....         | 62      | 23   |
| Ambergris .....      | 1       | 0    | Jalap .....         | 20      | 0    |
| Aniseed .....        | 20      | 10   | Kino .....          | 16      | 0    |
| Annatto-seed .....   | 35      | 0    | Kola .....          | 8       | 0    |
| Araroba .....        | 12      | 0    | Lime-juice .....    | 32      | 1    |
| Areca-nuts .....     | 98      | 10   | Liquorice-root ..   | 19      | 0    |
| Asafetida .....      | 78      | 43   | Menthol .....       | 7       | 0    |
| Bael fruit .....     | 1       | 1    | Myrrh .....         | 20      | 0    |
| Balsam, copaiba ..   | 9       | 0    | Nutmeg-paste .....  | 1       | 0    |
| Peru .....           | 2       | 0    | Nux vomica .....    | 344     | 201  |
| Tolu .....           | 6       | 2    | Oil, anise .....    | 10      | 0    |
| Benzoin—             |         |      | bay .....           | 1       | 0    |
| Palembang .....      | 43      | 0    | camphor .....       | 100     | 0    |
| Siam .....           | 17      | 0    | cinnamon-leaf ..    | 7       | 0    |
| Sumatra .....        | 161     | 0    | chaulmoogra .....   | 1       | 0    |
| Buchu .....          | 1       | 1    | eucalyptus .....    | 39      | 0    |
| Calumba .....        | 230     | 46   | kananga .....       | 8       | 0    |
| Camphor—             |         |      | lemongrass .....    | 1       | 0    |
| (Jap. ref.) .....    | 28      | 0    | lime .....          | 28      | 2    |
| Cannabis indica ..   | 41      | 0    | nutmeg .....        | 6       | 0    |
| Cardamoms .....      | 472     | 144  | orange (copper)..   | 1       | 0    |
| Cascara sagrada ..   | 112     | 72   | patchouli .....     | 5       | 0    |
| Cassia fistula ..... | 9       | 0    | wood .....          | 195     | 0    |
| Castorum .....       | 2       | 0    | Orange blossoms..   | 13      | 0    |
| Chamomiles .....     | 3       | 0    | Orange-peel .....   | 42      | 3    |
| Chiretta .....       | 30      | 13   | Orris .....         | 76      | 18   |
| Cinchona .....       | 76      | 5    | Otto of rose .....  | 8       | 0    |
| Cocaine .....        | 1       | 1    | Pareira brava ..... | 40      | 0    |
| Coca-leaves .....    | 10      | 0    | Pennyroyal .....    | 1       | 1    |
| Cocculus Indicus...  | 60      | 0    | Pongam-seed .....   | 59      | 0    |
| Colocynth .....      | 5       | 5    | Pumice-stone .....  | 185     | 0    |
| Croton-seed .....    | 14      | 0    | Quince-seed .....   | 3       | 0    |
| Cubels .....         | 77      | 0    | Quinine (ounces)..  | 1000    | 0    |
| Cumin-seed .....     | 57      | 0    | Rhubarb .....       | 180     | 22   |
| Cuttle-fish .....    | 196     | 108  | Sarsaparilla .....  | 79      | 12   |
| Dandelion-root ..... | 24      | 0    | Saffron .....       | 1       | 0    |
| Dragon's-blood ..... | 25      | 4    | Sandalwood .....    | 20      | 0    |
| Ergot of rye .....   | 8       | 0    | Senna—              |         |      |
| Fenugreek-seed ..    | 142     | 0    | Alexandrian .....   | 14      | 0    |
| Galls .....          | 5       | 0    | Mecca .....         | 21      | 0    |
| Gamboge .....        | 22      | 6    | Tinnevely .....     | 334     | 287  |
| Gentian .....        | 55      | 5    | Soy .....           | 60      | 0    |
| Guaiacum .....       | 10      | 5    | Squills .....       | 51      | 2    |
| Guinea grains .....  | 24      | 0    | Tamarinds .....     | 30      | 0    |
| Gum acacia .....     | 39      | 0    | Tonka-beans .....   | 12      | 1    |
| ammoniacum .....     | 27      | 0    | Vanilla .....       | 12      | 0    |
| Honey—               |         |      | Wax bees' .....     | 1027    | 37   |
| Australian .....     | 49      | 0    | Japanese .....      | 15      | 0    |
| Jamaica .....        | 51      | 37   | Yarrow .....        | 5       | 0    |

**ALOES.**—At the auction the genuineness of a parcel of 99 boxes from Curacao was doubted by one of the merchants, who asked if they were offered as "bitter aloes," or if the aloin had been extracted. This evoked the reply that the aloes was genuine Curacaos, and the broker guaranteed to take all risks; they were eventually disposed of at 21s. 6d. for the first three lots, consisting of fair brown liver, and 16s. 6d. to 17s. for the remainder of the parcel, which was black and capey. Of Curacao in gourds 529 were offered, and sold without reserve at 16s. 6d. per cwt. for small to medium size and mixed quality; the bulk, however, was livery. The first parcel of Cape aloes offered sold at 1s. lower rates, 23s. 6d. to 24s. being paid for good to fine bright hard, and 21s. to 22s. 6d. for seconds. A parcel of 31 cases offered by another broker was bought in, no attempt being made to sell; 25s. was wanted for fine bright hard. Of Socotrine aloes 10 kegs were shown, of which 5 sold at 75s. for fair orange brown, very soft. Sales have been made privately at this figure.

**ANISEED.**—For a parcel of Spanish 25s. per cwt. was paid at the auctions.

**ASAFETIDA.**—About 80 cases "ex the fire" were offered and sold without reserve, and with all faults, as follows:—Greyish and stony block, part very heavy, with some little gum, 5s. to 8s. 6d. (This parcel when first offered publicly was bought in at 50s.) Softish pinky and sandy block sold at 10s.; and for brown block, very sandy, with a little gum, from 2s. 6d. to 7s. 6d. was paid. The 7s. 6d. lot was a parcel for which originally 40s. had been paid on shipment to the U.S., from which country it was rejected by the Customs appraiser. Privately a few lots of good medium have been sold at 50s. per cwt.

**BAEL FRUIT.**—In slices, realised 1½d. per lb. "without reserve."

**BALSAM COPAIBA.**—In Liverpool about 9 barrels cloudy Maranham, fresh arrivals, sold readily ex quay at from 1s. 4¾d. to 1s. 5d., and three barrels bright at 1s. 6d. In the drug-auctions three casks of Maranham were bought in at 1s. 7¾d., and six packages of thin bright Para at 1s. 4d. per lb.

**BALSAM TOLU.**—For an odd parcel of 2 cases 1s. 2d. per lb. was paid; privately, for large tins 1s. 4d. is quoted, and 1s. 5d. for small.

**BENZON.**—The market remains well supplied, but at auction to-day not a single package of any description was disposed of. Good Sumatra seconds were bought in at 9½s. to 10½s.; and fair ditto at 8½s. to 8½s. 10s. per cwt. Of Siam, 6 cases of good white almonds, partly free and partly in block, were bought in at 14½s., and Palembang seconds at 55s. per cwt.

**BUCHU-LEAVES.**—There is practically nothing to be had on the spot. In auction to-day only 1 bale was offered, and sold at 8½d. per lb. for slightly yellowish and stalky round leaf, which was dearer compared with the last sale's rates.

**CALUMBA.**—In good supply, but little demand. Of a parcel of 46 bags offered, 29 bags common small to bold stemmy sold at 16s. 9d., and dark sorts sea-damaged at from 7s. to 15s. per cwt.

**CANNABIS INDICA.**—Unchanged; fair tops were held for 1s. 2d. per lb., and siftings at 10d. Sales are reported to have been made privately at these prices. According to New York advices the market there appears to be rather easier, but the stocks cannot last much longer, and eventually the United States will be buyers on this market.

**CARDAMOMS.**—The fair assortment offered sold at slightly easier rates as follows:—Ceylon-Mysore, medium to bold pale long, 2s. 11d. to 3s.; dullish ditto, 2s. 8d. to 2s. 10d.; medium pale long, 2s. to 2s. 5d.; small to medium pale, 1s. 8d. to 1s. 10d.; medium unclipped, 1s. 6d.; small pale, 1s. 4d. to 1s. 6d.; very small pale, 1s. 2d. to 1s. 3d.; brown and split, small to medium, 1s. to 1s. 3d.; good ditto, 1s. 4d. to 1s. 5d.; seed from 1s. 3d. to 2s. per lb. No Ceylon Malabars or Tellicherry's were sold.

**CASCARA SAGRADA.**—Damages were the only kind disposed of in the auction, and they realised 14s. to 15s. per cwt. Privately sales have been made on the spot at 24s., but for four or five-year-old bark 27s. is wanted.

**CHIRETTA.**—Unchanged. Fourpence per lb. was paid for fair quality from Calcutta.

**COCA-LEAVES.**—There are a few lots of Truxillo-leaves to be had at from 1s. to 1s. 3d. per lb., but quality is not fine. In auction thin dull and green Truxillo-leaf was held at from 1s. 2d. to 1s. 4d. per lb.

**COLOCYNTH.**—For 5 cases of Spanish lying at Liverpool 8¾d. per lb. was paid.

**CUBEBS.**—Unchanged, and it is difficult to hear of any business having been done privately. In the drug-auctions 60s. to 65s. was wanted for good berries.

**CUTTLEFISH.**—Small broken bone (16 bales) sold without reserve at 2¾d. per lb.; and 11 bags ditto at 2½d.; of another lot of 158 packages 81 sold at from 2¼d. to 2¾d. "without reserve."

**DRAGON'S-BLOOD.**—Very firm; for fine bright lump and ball 14½s. was paid, and business has been done privately at 16½s. A package of Zanzibar drop sold at 26s. per cwt.

The exports from Singapore for the first seven months of the

year were 129 piculs, against 152 in 1899, 40 in 1893, 74 in 1897, and 64 in 1896.

**ERGOT.**—Bold sound Spanish of new crop was held for 2s. 8d. per lb.

**GAMBOGE.**—Good Siam pickings sold at from 7½s. to 7½s. 6d. per cwt., subject; very broken ditto, 6½s. 10s., and dull, 5½s. 10s. per cwt.

The exports from Singapore to Great Britain for the first seven months of the year amounted to 50 piculs, against 178 piculs in 1899.

**GENTIAN.**—Good bright cut root sold at 24s. per cwt.

**GUAIACUM.**—Good glassy block was bought in at 1s. 6d. per lb., and drossy and dusty broken block sold cheaply at 3½s., low ditto at 1½d. per lb.

**GUM AMMONIACUM.**—Siftings realised 21s., and dark seedy block 12s. per cwt., subject.

**HONEY.**—New Zealand was well competed for, 51s. 6d. to 53s. being paid for prime; Jamaica sold readily at 25s. to 27s. for liquid. Sales of about 90 barrels Chilean have been made in Liverpool at 22s. 6d. for Pile 2, and 24s. for Pile 1; 20 cases Californian have also been sold at 48s. 6d. per cwt.

**IPECACUANHA.**—Rio was about 2d. to 3d. per lb. cheaper compared with last sales rates. The first 31 bales offered were highly limited, only 1 bale selling at 12s. 2d. for good bright sound. Thirty-two bales comprised the second lot, of which 22 sold at from 11s. 9d. to 12s. for fair to good stout root, and from 10s. 6d. to 11s. 6d. for sea-damaged. No sales of Cartagena were made, one lot of 39 bags being held for 7s. 6d. per lb.

**MYRRH.**—For a parcel of dusty pale and part dark Aden sorts a bid of 57s. 6d. was refused, but we understand that this lot was sold after the sale at 60s. Sales privately have been made at 55s. for fair pale sifted gum.

**NUX VOMICA.**—A parcel in one of the broker's hands was sold practically without reserve. It realised from 5s. to 5s. 6d. for fair bright small Madras, this quality having been sold privately lately at 7s. per cwt., c.i.f.; 21 bags of low pickings realised 2s. 6d. per cwt., subject.

**OIL, CHAULMOOGRA.**—In auction a package of rather yellowish quality was bought in at 4s. per lb. The new crop has been arriving freely of late; 3s. 9d. to 4s. is quoted privately.

**OIL, EUCALYPTUS.**—For B.P. quality from Melbourne, containing above 60 per cent. eucalyptol, 1s. 7d. per lb. is wanted.

**ORRIS.**—Brown Verona-root realised 21s. to 22s. per cwt. when offered without reserve; for fine white bold picked Florentine 50s. per cwt. was paid, and 4 serons of brown Mogador sold at 20s.

**PENNYROYAL.**—A bale of this herb sold without reserve at 1½d. per lb.

**RHUBARB.**—Slow of sale. New high-dried, medium flat (2 cases), sold at 9½d.; good to fine flat, fair pinky fracture (3 cases) at 10d. Shensi, small flat, 1s.; ditto, part trimming root, 11d.; rough pickings (3 cases), 10d. A wormy parcel (12 cases) was put up "without reserve," and sold as follows:—Shensi, medium round, fair coat, half grey and half grey and dark fracture, 6¾d. per lb.; flat ditto, 7¼d. medium round and flat, half pinky and grey, half grey and dark, 6¼d. Bold flat Canton, woody, three-quarters pinky and grey fracture, one-quarter grey and dark, 9¼d.; medium to bold round ditto, 9d.; and flat ditto, 8d.

**SARSAPARILLA.**—Of 21 bales grey Jamaica offered 7 sold at 1s. 8d. per lb. for sound. Lima-Jamaica, sound, realised 1s. 4d. and damaged 1s. 2d. No native Jamaica sold, although there was plenty offered.

**SENNA** sold at firm rates, although the colour was not quite so good as that of the previous sale. Tinnevely, fine bold green leaf, realised 5d. to 5½d. per lb.; medium to bold greenish, 3¼d. to 4¼d.; fair to medium ditto, 2¼d. to 2½d.; ordinary small brownish leaf, 1½d. to 2d. per lb. Pods, 3¼d. to 4¼d. Of Mecca, 21 bales were offered and bought in; 1½d. was the limit.

**SOY.**—Good Chinese sold "without reserve" at 1s. 3d. per gal.

**TONKA BEANS.**—A case of foxy Pará sold at 10½d. per lb.



## War Notes.

RETURNED FROM ACTIVE SERVICE.—As the campaign in South Africa draws to a close, the wounded and invalided soldiers begin to appear at home in larger numbers. By one of the latest transports Civil Compounder MacCreath has returned invalided, and he has called to see us and gave us an interesting chat on his war experiences. Mr. MacCreath volunteered for service, and was sent out from Aldershot to South Africa at the beginning of the year. Our illustration is taken from a photograph showing him and Compounders Hallam and Gildart. Shortly after his arrival there he was drafted up to Bloemfontein, and worked from there eastwardly with convoys of sick and wounded to and from Thaba 'Nchu and the district to the east of the Orange River Colony, being chiefly in touch with General Rundle's forces. His experiences on the field were of an extremely rough nature, as General Rundle's troops were probably more isolated than any other section of the grand army during the march northward from Cape Colony to the Transvaal. Mr. MacCreath ultimately contracted enteric and dysentery, and after many hardships entered the Bloemfontein General



BEFORE LEAVING FOR THE FRONT.  
(Mr. MacCreath is in the centre.)

Hospital, but was forwarded to Cape Town, where he became convalescent, and was finally invalided home. He gives us some interesting information concerning dispensing and dressing in the field and general hospitals:—

The principal method in which medicines are administered to the sick is in the tabloid form, such as tab. quin. c. acid. sulph. dil. 5 gr. These are, of course, given in cases of fever. When the case is not a very bad one the man is admitted into field hospital where comforts are unknown, and treated there until such time as he is conveyed to the general hospital, which may be twenty or thirty miles distant. He is taken there on a bullock-waggon with nothing but the plain boards to lie upon. On reaching hospital he is treated with condensed milk as his principal food. This is invariably boiled with water such as one would not care to wash in at home, and as a rule there is considerably more water than milk. A few cases, of course, do not adapt themselves to such luxurious treatment, and Lemco is substituted. Unfortunately, however, the patient sees rather more of the jar than the extract it contains, supplies being always very scanty and limited. When a patient arrives at hospital he is greeted with a smile from one

of the nursing sisters, and asked if he would like some brandy and milk or beef-tea. He is then very cautiously placed in a cot, where he remains until such time as the doctor thinks him fit to travel. Wounds caused by explosive bullets are always dressed with an antiseptic solution, such as boric-acid lotion, and then with a dry dressing of iodoform sprinkled on double cyanide gauze, and a pad of boric wool. This is the daily routine of dressings, and some, as in the case of a man I saw belonging to the Gordons, who was shot in the back and had an enormous wound between the shoulder-blades, require a great deal of attention. The native remedy for dysentery, from which I



ROOT OF MONSONIA OVATA ( $\frac{3}{4}$  nat. size).

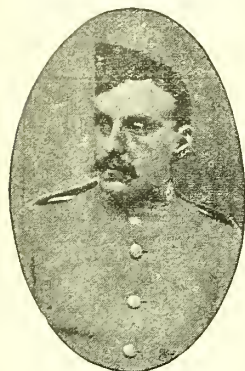
This root has been used by the Kaffirs for more than a century, and many Cape doctors speak highly of it. It has been recommended for inclusion in the B.P. Addendum. Externally it resembles gentian-root. It is known as wild pelargonium root. The Kaffirs simply chew it. The R.A.M.C. also prepare an antidysenteric mixture by boiling 4 oz. of the root for twenty minutes in a pint of milk. One to two tablespoonfuls are given every two hours till all the symptoms of dysentery are gone. This usually takes place within forty-eight hours.

suffered myself, is a root which resembles very much a banana in shape; it has powerful astringent properties and is known as *Monsonia ovata*. The preparation made from it is the tincture, of a strength about 1 in 20. The root is of a dark-purple colour.

The tincture is used in the 5th General Hospital very largely, and is usually given in 5j. doses. I had several cases of rheumatism, dysentery, and debility to look after. A 5-gr. tabloid of potass. bicarb. occasionally is considered sufficient for a rheumatic patient until he arrives at one of the hospitals; with dysentery 10-gr. tabloids of pulv. cretæ aromat. c. opio are generally given, but in most cases the mist. pro diarrhœa, which is in a concentrated form, is substituted in doses of from 15 to 20 minims every four hours, the patient being cautioned to avoid all such luxuries as bully-beef, for which he is given as a substitute beef-tea and milk diet. For debility the treatment is condensed milk and water simply, with an occasional cup of beef-tea. There have been many complaints about the treatment of patients in the hospitals, and it may be interesting to state one or two incidents in my own case. When I was admitted into Winberg hospital with enteric fever, I was deprived of the collection of curios which I had managed to gather together during the campaign; two 12-lb. shells, three pom-poms, two tins of Three Castles cigarettes, a 1s. tin of Burroughs, Wellcome & Co.'s tea-tabloids, some Kruger money, a pocket-knife, bullets, and watch and chain—all disappeared, and I never saw them again, not being in a fit condition to lodge my complaint at the time. From the Town Hall, Winberg, I was removed to the church while I was in a very serious condition, and later again I was sent to Deelfontein. We were two days in a hospital-train where comforts prevailed, as there we were each presented with a Red Cross bag by the Good Hope Society for Wounded or Sick Soldiers. The contents of these bags are one suit of pyjamas, shirt, wool socks, slippers, sponge-bag containing sponge, soap, tooth-brush, and hair-brush, all very useful articles, except the slippers which were an enormous size. All that we received on the train was stimulants, such as brandy and port wine, or boiled milk and brandy. On arrival at Deelfontein, at the Imperial Yeomanry Hospital, I was kept on a stretcher for quite three-quarters of an hour on a side platform,



afterwards being transferred into a hut where the doctor was very attentive, and placed me on plain milk diet for three days. This is the general rule, on account of there being so many relapses after a journey, with temperatures generally going up. On being transferred from one hospital to another all the clothing is fumigated, and on entering a hospital the same operation is conducted. At this hospital we were treated in a much better



MR. MACCREATH.

From photo taken in C. & D. Office on his return from the Front.

Hospital treatment was resumed, and although it was not altogether bad, there was certainly much room for improvement. At last, when the diet-sheet is marked E., the patients parade in front of the Colonel of the R.A.M.C., and if he signs the sheet, it means England by the next ship; otherwise, a man remains for some weeks, and in most cases is sent up country again to return to his duty at the front.

We shall have more from Mr. MacCreath for a later issue. We add the second portrait to show how the campaign tells upon the pharmaceutical constitution.

**COMPOUNDERS' TERM OF SERVICE.**—The compounders of the R.A.M.C. in Natal are concerned as to what is to be done with them on the conclusion of the war. The terms under which the civil compounders volunteered for service in South Africa are as follows:—To serve for the term of the war, with pay at 3s. 6d. a day, free rations and kit; passage to and from South Africa, and two months' pay as a gratuity in addition to any general gratuity which may be distributed to the troops on the termination of the war. These terms will be carried out to the letter, we understand, although it is possible some men may obtain their discharge by favour before leaving South Africa. It is most probable that all the compounders will, as soon as their services can be dispensed with, be sent back to England and here obtain their discharge. If any inducements are to be given to those who have fought in South Africa to return there as settlers, no doubt the compounders will be included in the scheme, but up to the present the Government have not decided upon this matter.

**DR. CONAN DOYLE IN THE O.R.C.**—In a characteristic descriptive article in the "Strand Magazine" for September, Dr. Conan Doyle commends the bravery of Tommy Atkins and his colonial brothers-in-arms, and notes the carelessness of some of the regimental officers in the operations which came under his notice in the O.R.C. We take the following paragraph as descriptive of the work of the R.A.M.C. under fire:—

A horseman canters past with a stretcher over his shoulder. He passes the guns and infantry and rides on along the edge of a maize-field. He disappears in a dip of the ground. After a time the stretcher appears again. This time two men are carrying it, and the horseman rides beside. I have bandages in my pocket, so I ride forward also.

"Has the surgeon seen him?"—"No, sir."

They lay the man down. There is a handkerchief over his face.

"Where is it?"—"His stomach and arm."

"Pull up his shirt," and there is the Mauser bullet lying obvious under the skin. It has gone round instead of penetrating. Nice clean wound in the arm.

"You will do well, sir. What is your name?"

"Private Smith, New Zealander."

I mention my name and the Langman Hospital.

"I have read your books," says he, and is carried onward.

Further on, as follows:—

Among the stones lay a package of venomous-looking green cartridges still unfired. They talk of poison, but I doubt it. Verdigris would be an antiseptic rather than a poison in a wound. It is more likely that it is some decomposition of the wax in which the bullets are dipped.

We say good-bye to the army, for our work is behind us and theirs in front. For them the bullets, for us the microbes, and both for the honour of the flag.

A day at Brandford, a night in an open truck, and we are back at the Café Entierque, Boulevard des Microbes, which is our town address.

**CIVIL COMPOUNDER'S EXPERIENCES.**—In our letter this week Compounder E—, in his journey from Naauwpoort to Johannesburg, gives an account of his experiences and his meeting with *confreres* and old friends *en route*:—

On Monday, July 9, two-thirds of the hospital were warned to be in readiness to proceed to Johannesburg. This order had been issued twice previously and countermanded as many times. This time, however, we were not disappointed. Two-thirds of the hospital staff with the necessary equipment entrained on July 11. James and myself were the compounders selected, Wilson staying behind with the patients—chiefly enteric and convalescent. Before we started, two hospital-trains came through. The first was an ambulance-train from Johannesburg. Horsburgh was the compounder. His has, indeed, been a most fortunate experience, as I think he has knocked about most and taken part in the majority of the branches of R.A.M.C. work. The second train, which came down an hour or so afterwards, was our No. 5 hospital-train from Bloemfontein, with 116 patients on board. Windsor was compounder on this train. From Naauwpoort the first important stop was Norval's Pont. From there to Bloemfontein the journey was rather an interesting one. A feature of the journey is the number of carcasses of oxen and horses one sees lying within view of the railway track, the result, no doubt, of Lord Roberts' rapid march on Pretoria. Bloemfontein was reached at 3.30 a.m. of the 12th, and it was our lot to stay here five days. There was no opportunity of going up, as all the available accommodation was required for troops and stores. We had a good look round Bloemfontein, and met several of our Aldershot friends among the compounders here. As we entered the grounds of the Raadzaal the first person we met was Compounder Pearson, looking very well indeed. He showed us round, and we exchanged greetings with Palmer, who is the veteran compounder, I believe, in South Africa. The surgery is situated in the porch of one of the side entrances, and is very convenient and well arranged. The main hall and committee-rooms were all occupied by patients, about 150 in number, and among these we came across Compounder Young, who had the good fortune to be compounder to Lord Roberts's Staff. Unfortunately he contracted rheumatic fever, and although convalescent when last we saw him, has since left for England. It was in this hospital that poor Armstrong succumbed to enteric.

Next day No. 8 General Hospital received our attention. There were five compounders here—viz., Sloane, Hobson, Burke, Daine, and Black. Black was under orders for duty in Pretoria. He has since arrived there, and is doing duty at the Model Schools.

Sloane is in the x-ray room, and attends to that, and does photographic work also. The rest are employed in the surgery, although some of them have done orderly-duty in the wards, against their wish, which, strictly speaking, does not seem fair in the face of our terms of enlistment. I have been sorry to hear several complaints of this sort, and all the more so, because none of the compounders of No. 6 General Hospital have been under such difficulties. There are four volunteer compounders with No. 9 Hospital in Bloemfontein. They have had very busy times of it indeed, and are also under canvas.

We had to leave Bloemfontein on the 17th, after a very pleasant halt. Of course, there was not room for all to go in the vans, so that some had to travel on top of supplies, and considering the surface was rather an uneven one, with frosty nights and still two days' journey in front of us, the alternative was by no means a pleasant one. With the exception of occasional halts of a few hours, the journey was an uneventful one. The damage done to the line in various places is amazing. About two hours' journey off the Vaal River we passed a large convoy of 160 waggons, which had been captured by our mounted infantry when on its way to join De Wet.

We arrived at Johannesburg on Thursday, July 19, at mid-day, and were not at all sorry to find we were at the end of our journey.

COMPOUNDER E.

THE exports of tonka-beans from Puerto Cabello, Venezuela, during 1899 amounted to 485 lbs., valued at £243. They were shipped to the United States.



Paris Exhibition, 1900—British Awards.

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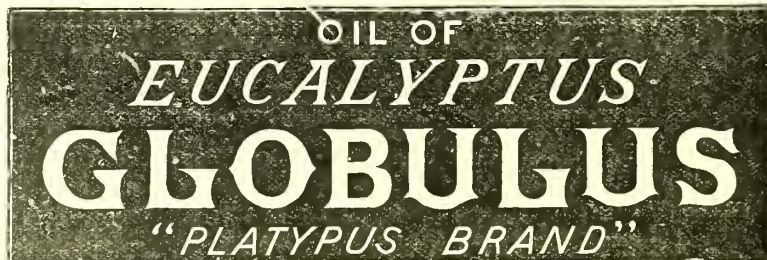
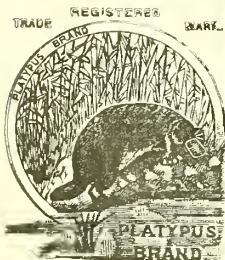
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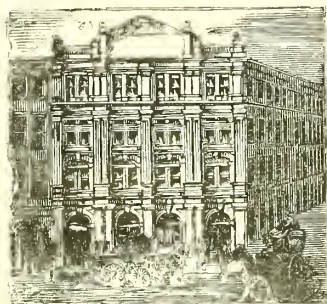
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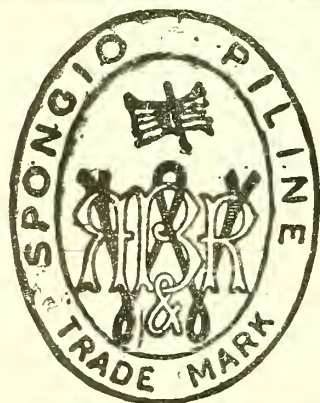
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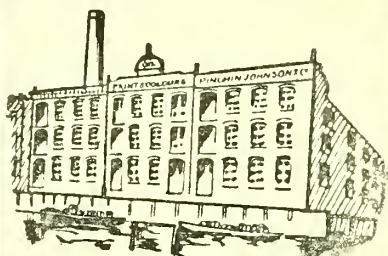
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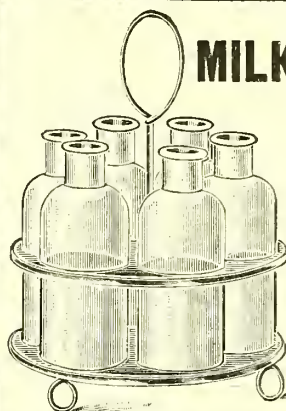
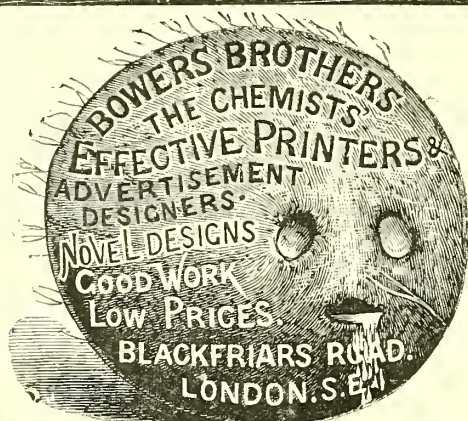
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SURE TO REGULATE THE BOWELS.

Depend upon it, Mothers, it will give rest to yourselves and

RELIEF & HEALTH TO YOUR INFANTS.

Mrs. WINSLOW'S SOOTHING SYRUP

Has been used for over Fifty Years by millions of Mothers for their children while Teething with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhoea.

RETAILED BY CHEMISTS ONLY.

Wholesale from **THE ANGLO-AMERICAN DRUG COMPANY (Limited),**
33 Farringdon Road, London.

R. HOVENDEN & SONS, BERNERS ST., W.,
AND CITY ROAD, E.C., **LONDON.**
 LIMITED,

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548 Pages, and over 2,350 Illustrations, Post Free on receipt of
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TERMS—2½ PER CENT. CASH DISCOUNT.

WHOLESALE DEALERS IN AND MANUFACTURERS OF

Perfumery, Patent Medicines,
DRUGGISTS' SUNDRIES,
FANCY SOAPS, ESSENTIAL OILS,
TOOTH, NAIL, and HAIR BRUSHES, COMBS, CUTLERY,

*Toilet and Smelling Bottles, Spray Producers, Manicure Goods,
 Spirits of Wine, and all Articles dealt in by Chemists, &c.*

PROPRIETORS OF—

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STROPS, AND PASTE
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THE RAZOR SCISSOR
HOVENDEN'S SHAVING SOAP
MARRIS'S MARKING INK

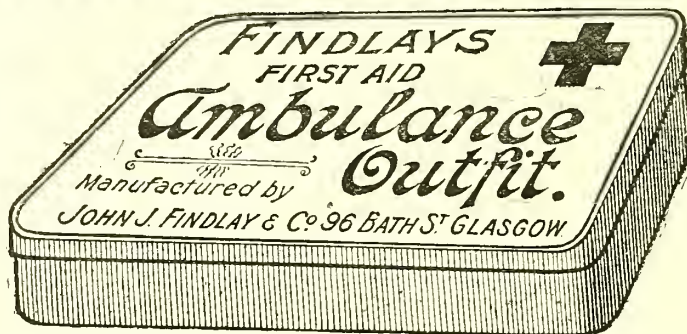
SWEET LAVENDER PERFUME
MARRIS'S ALMOND TABLETS
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SHAYER
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CHAPLIN'S TOILET VINEGAR & BATH POWDERS
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MECHI'S RAZOR STROPS and Paste
NUDA VERITAS HAIR RESTORER
PICARD FRERES' POUDRE D'AMOUR
PICARD FRERES' VALINEROSE
PINAUD'S PERFUMERY, and all other preparations
PRAY'S (Dr. J. PARKER) MANICURE GOODS
ROBARE'S AUREOLINE
ROBERT FRERES' PERFUMERY
ROYAL WINDSOR HAIR RESTORER
SCHWARZLOSE'S HAIR DYE | **SKINHEAL**
VOOGD'S RAZORS, SCISSORS, and all other articles

The Pocket Ambulance Outfit.



FINDLAYS FIRST-AID AMBULANCE OUTFIT consists of Antiseptic Gauze, Adhesive Plaster, Wood Wool Pad Triangle Bandage, and Safety Pins. Contained in a neat decorated tin box measuring $5\frac{1}{4} \times 3\frac{1}{2} \times 1$ in. It is very highly recommended by Ambulance Surgeons on account of its usefulness, combined with moderate cost. Very handy for Cyclists, &c., &c.

Price 10/- per Doz. net. Discount for Quantities.

CREPE RUBBERLESS ELASTIC BANDAGE.

2 inches, 10/- ... $2\frac{1}{2}$ inches, 12/- ... 3 inches, 15/- ... $3\frac{1}{2}$ inches, 18/- per Doz.
EACH BANDAGE IN A BOX. DISCOUNT FOR QUANTITIES.

THE "ST. MUNGO" RUBBERLESS ELASTIC BANDAGE.

This is **not** a Crêpe Bandage, but has much more body, and is at the same time remarkably light and comfortable to wear.

2 inches, 7/- ... $2\frac{1}{2}$ inches, 8/- ... 3 inches, 9/- ... 4 inches, 12/- per Doz.
EACH BANDAGE IN A BOX. DISCOUNT FOR QUANTITIES.

PRICE LIST OF SURGICAL DRESSINGS & APPLIANCES ON APPLICATION.

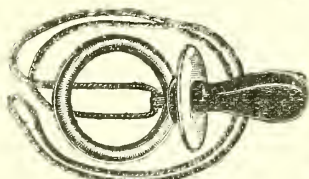
JOHN J. FINDLAY & CO. Surgical Bandage & Dressing Manufacturers, **96 BATH ST., GLASGOW**

ORDERED TO THE FRONT.

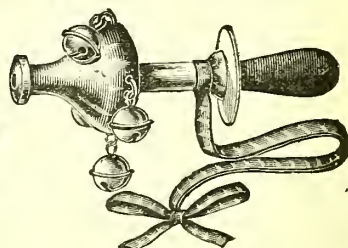
HOLDFAST PACIFIERS AND BOTTLE UNIONS.

NO MORE CHILDREN CHOKED.

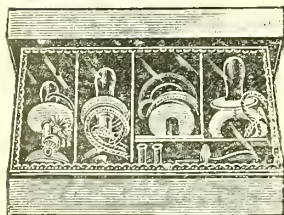
REGISTERED TRADE MARK.



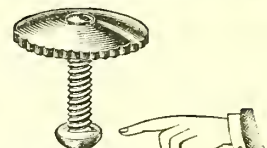
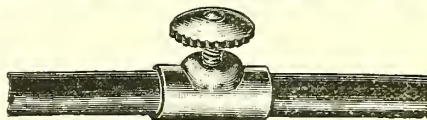
73 B. Sp. 1d. Line.
Carded 1 dozen.



106 B. 2/- Line. Trumpet and Bells.
Best White Metal each in a G. T. Box.

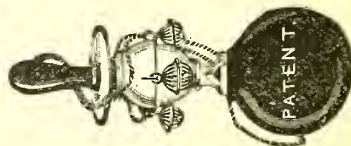


106 B. 2/6 Line. G. T. Box.
Contains Best Pacifiers and
Bottle Unions.



LOOSE CAP

107 B. 1d. Line Patent Food Regulator. 1 dozen cards.



67 B. 1/- Line.
Ball, Whistle, and Bells, each in a Box.

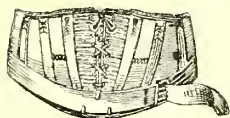
MORE THAN ONE HUNDRED LINES, from 1d. to 2s. 6d.

The advantage of the Holdfast Pacifier and Bottle Unions is that they cannot be pulled apart, and the Food Regulators cannot possibly be displaced, and having a loose cap will not cut the tube.

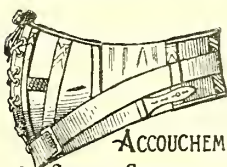
Send P.O. for 5s. or 10s. and I will forward you choice selection, post free.

PATENTEE AND MANUFACTURER—

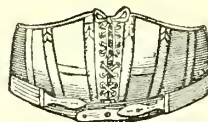
A. S. CARTWRIGHT, 75 Ford Street, BIRMINGHAM.
HOCKLEY,



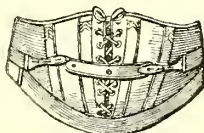
PREGNANCY.



ACCOCHEMENT
& GENERAL SUPPORT.

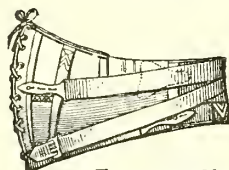


HYPOGASTRIC.

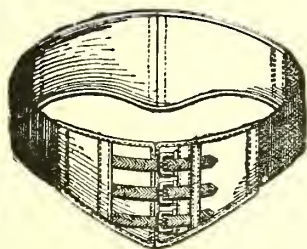


UMBILICAL HERNIA

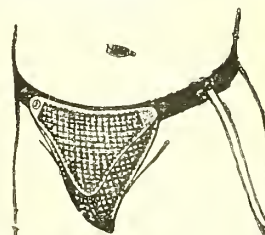
PADS
TO SUIT
ALL
CASES



FLOATING KIDNEY



MEN'S BODY BELT.



THE "STOW-AWAY"
SUSPENSORY.

**Our New
Illustrated Shipping
List Now Ready.**

**DOMEN
BELTS CO.,**

456 STRAND, CHARING CROSS, W.C.

SCOTTISH ACID & ALKALI CO.

(LIMITED),

Mr. R. H. STEEDMAN, Managing Director.

MANUFACTURERS OF

RESUBLIMED IODINE,

PURE IODIDES of POTASSIUM & SODIUM,

IODOFORM,

Commercial Sulphuric Acid.

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Sole Agents—KIRKPATRICK, BARR & GUTHRIE, 4 Cullum
Street, LONDON, E.C.

Special Quotations on Application.

BUYERS' GUIDE.

See pages 9, 10, and 11.

HOLLOWAY'S PILLS & OINTMENT

Have the Largest Sale of any Medicine in the World.

MANUFACTURED ONLY AT

PROFESSOR HOLLOWAY'S ESTABLISHMENT,
78 New Oxford St. (late 533 Oxford St.), London.

And sold at 1s. 1d., 2s. 9d., 4s. 6d., 11s., 22s., and 83s. each Box or Pot.
Chemists and Druggists selling "Holloway's Pills and Ointment" can, on appli-
cation to the above address, or to the Wholesale House with whom they deal, be
supplied free of charge with Handbills and Posters with their name and address
printed at foot.

Wholes Terms, see List of "Proprietary Articles" in most Prices Current.

**CASCARA-
HAWLEY**

Tasteless Gelatine Capsules, con-
taining the equivalent of half a
teaspoonful of the Concentrated
Fluid Extract of the B.P.
CASCARA-HAWLEY is recog-
nised as the Standard Cascara
Capsule.

In Boxes, with handsome label, 20 capsules, 1s. 1½d.;
100 capsules, 4s. 6d.

**EVANS, LESCHER & WEBB,
LONDON.**

"THE LEICESTER"

— TRADE MARK —

POROUS PLASTERS

Of Reliable Strength and Guaranteed Purity
IN RUBBER COMBINATION.

BELLADONNA,

BROWNISH COLOUR, STANDARDISED.

Containing 0.5 per cent. Root Alkaloids.

	Per dozen.	Sizes, $7\frac{1}{2}$ by 5	9 by 6	12 by 7
On Cotton Cloth	...	3/6	5/-	8/-
On Scarlet Felt	...	4/3	6/6	10/-

STRENGTHENING.

	Per dozen.	Sizes, $7\frac{1}{2}$ by 5	9 by 6	12 by 7
On Cotton Cloth	...	2/1	3/6	5/-
On Scarlet Felt	...	3/3	5/4	8/6

CAPSICUM.

Same prices as Strengthening Plasters.

Name and Address of any Customer printed without extra charge on lots of one gross, which may be assorted.

SUBJECT TO USUAL DISCOUNT.

A. de St. DALMAS & Co.

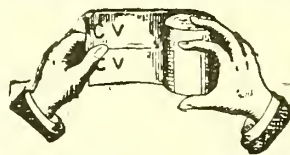
(Formerly MOOR—Established 1823),

LEICESTER.

Contractors to Her Majesty's Government.

WARNING.

Owing to the success of my "EUREKA" CREPE VELPEAU RUBBERLESS POROUS BANDAGES, the trade are being offered spurious and foreign made imitations. The only way to avoid being thus victimised is to distinctly ask for the "EUREKA" make. If you have been induced to purchase any of these imitations, purporting to be mine, return them at once, and see that the correct ones bear my trade mark, "EUREKA," Regd. No. 228376.

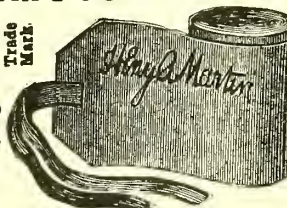


Price per doz. Rolls, 2 in. 12/- 24 in. 15/- 3 in. 18/- 8 in. 36/- 11 in. 54/-
2nd quality 9/- 12/- 15/-

VINCENT WOOD, 4 ALBION PLACE, BLACKFRIARS BRIDGE, S.E.

DR. MARTIN'S PURE RUBBER BANDAGES

For
Varicose
Veins, Ulcers,
Eczema of the
Leg, Swollen
and Weak
Joints.



CAUTION.—Please order Genuine Martin's Bandages, each being stamped with Dr. Martin's signature. All others are Spurious Imitations.

Complete Price List Trade Discount, and Dr. Martin's Pamphlet post free.

No.	PRICES.	Feet	Inches	Each
3A.	Thin, for ankle, elbow, wrist, and forearm	8	2 1/2	3/6
3.	Thick "	8	2 1/2	4/-
1B.	Thin, for leg below knee	10 1/2	3	5/6
1A.	Thick "	10 1/2	3	7/6
8.	Thin, for leg and knee	14	3	7/6
7.	Thick "	14	3	9/6
8B.	Thin, for leg and thigh	21	3	10/6
8A.	Thick "	21	3	13/6

Sole Agents—KROHNE & SESEMANN, SURGICAL INSTRUMENT MAKERS
87 DUKES STREET, MANCHESTER SQUARE, LONDON.



NEWSHOLMES'S POCKET SPITTOON

Registered No. 349532.

To Prevent the Spread of
Tuberculosis, &c.

This Pocket Spittoon has been brought out on the lines suggested by the Medical Officer of Health for the City of Sheffield. Made of dark blue glass, having closely-fitting nickel-plated lid.—Just fits the handkerchief pocket, and may be readily emptied and sterilised.

Price 1/6 each. 16/- per dozen.

In gross lots, 15/- per dozen.

Carriage paid on 1 dozen and upwards.

Sole Maker: G. T. W. NEWSHOLMES,
Manufacturing Pharmaceutical Chemist,
27 HIGH STREET, SHEFFIELD.

ABSOLUTELY PURE LIGHT

Carbonate of Magnesia

IN FINE POWDER, AND 1, 2 AND 4 OZ. BLOCKS.

For Medicinal and Technical Purposes, Boiler and
Steam-pipe Covering,
Printing Ink and Dynamite Manufacturing, &c.

APPLY FOR PARTICULARS TO

SAMUEL LAMBERT & CO.,
132 Fenchurch Street, LONDON.

SELLING AGENTS FOR

THE AMERICAN MAGNESIA COMPANY.
Stock carried in London.

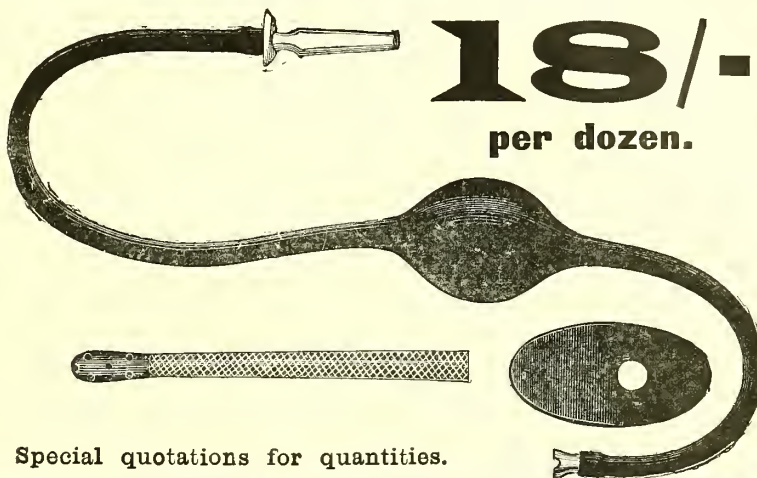
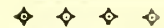
SOME E. W. B. LINES.

CARRIAGE PAID.

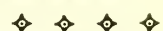
Notwithstanding the recent advance I am still able to quote India-Rubber Goods at reduced prices, **CARRIAGE PAID.** This is a full sized Black Enema, **Highly Polished and Guaranteed for Two Years**, each in box complete, with Vagina Pipe and Shield.



Quarterly
Accounts can
be
opened on
giving
satisfactory
references.



18/-
per dozen.



Complete
PRICE LIST
of
DRUGGISTS'
SUNDRIES
upon
application.



Special quotations for quantities.

EDWARD WOOLF, ST. GEORGE'S CRESCENT, BIRMINGHAM.

Telegraphic Address—"SOOTHERS BIRMINGHAM."

IMPORTANT NOTICE.

J. H. HAYWOOD is pleased to inform his old friends and new patrons that he has **REMOVED** his **LONDON DEPÔT** to Larger Premises, situated at

16 SILVER STREET, WOOD STREET, E.C.

Where will be held a larger Stock for the convenience of the Trade.

THREE GREAT LEADING LINES.

SEAMLESS ELASTIC STOCKINGS, made in one piece without seam. Stocked in all the usual sizes.

PREMIER THREAD ELASTIC HOSIERY, made from a new material, soft, with the appearance of **SILK**.

KHAKI TRUSSES. Superior finish, shaped springs, good fitting, and supplying a long-felt want, as they **WILL NOT SHOP SOIL**.

Manufacturer of every description of Surgical Appliances, Ladies' and Gents' Belts, Expanding Braces, Suspensory Bandages, Trusses of every known style (Aluminium, Rubber, and Gum Elastic, covered Trusses for Bathing), Elastic and Stockingette Bandages, Washing and Rubbing Gloves, Athletic Appliances for Cricket, Golf, Football, &c., &c.

J. H. HAYWOOD, CASTLE GATE, NOTTINGHAM.

LONDON DEPÔT: 16 Silver Street, Wood Street, E.C.

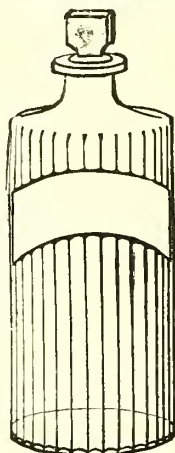
LONDON MANAGER: T. T. SHERBORNE.

TOOGOOD'S WHITE GLASS POISON SHOP ROUNDS

(Conforming to the Poison Regulations).

Extract from Regulations—

b. Poisons to be kept in a bottle or vessel, **distinguishable by touch** from the bottle or vessel in which ordinary articles are kept in the same warehouse, shop, or dispensary.



SIZES:—

	8	16	20	32	40	48	oz.
Height to Shoulder	4	5	6½	6½	7	7½	in.
Height to top of Stopper	5½	7½	7½	9	10½	10½	in.
N.M.	8/-	11/-	12/-	15/-	16/-	18/-	doz.
W.M.	9/-	12/-	13/-	16/-	17/-	19/-	..

LABELLING IN GOLD, 3/6 doz.

WILLIAM TOOGOOD,

Burlington Buildings, Heddon Street, Regent Street, LONDON, W.



PRICES ON APPLICATION.



BOTTLES

OF ALL DESCRIPTIONS

For Chemists, Perfumers, Distillers, Laboratories.

COLIN CAMPBELL & CO.

SHOWROOMS: 5 SAVAGE GARDENS (near Tower of London).

WAREHOUSES: LONDON WHARF, WEST FERRY ROAD, MILLWALL, E.

Telegraphic Address: "CIVILIDAD LONDON."



Corrugated Envelopes for Chemists, &c.

NEW SHOP BOTTLES.



Good Bottles

OF EVERY DESCRIPTION

(Plain and Stoppered)

AT

RIGHT PRICE.

HEARNS, LIMITED,

ECLIPSE GLASS WORKS,
LEA BRIDGE, CLAPTON, LONDON, N.E.

DISPENSING BOTTLES.

THE NORTH LONDON GLASS BOTTLE COMPANY

(I. ISAACS & CO., Proprietors)

Beg to inform the Trade that they have made a further reduction in the price of their Bottles, as follows:—

The NEW SHAPE FLAT BOTTLES, with rounded edges, plain or graduated—

3 & 4 oz. .. 9/- per gross. | 10 & 12 oz. .. 15/- per gross.
6 .. 8 .. 10/- .. | 16 .. 18/- ..

WHITE MOULDED PHIALS, plain or graduated Teaspoons—
1 oz. .. 3/8 per gross. | 1½ oz. .. 4/9 per gross.
1 .. 4/- .. | 2 .. 5/8 ..

PLEASE NOTE.

Six gross and upwards, assorted or otherwise, are carriage paid to any address in England; smaller quantities not carriage paid.

I. ISAACS & CO., Glass Bottle Manufacturers,
106 MIDLAND ROAD, ST. PANCRAS, LONDON.

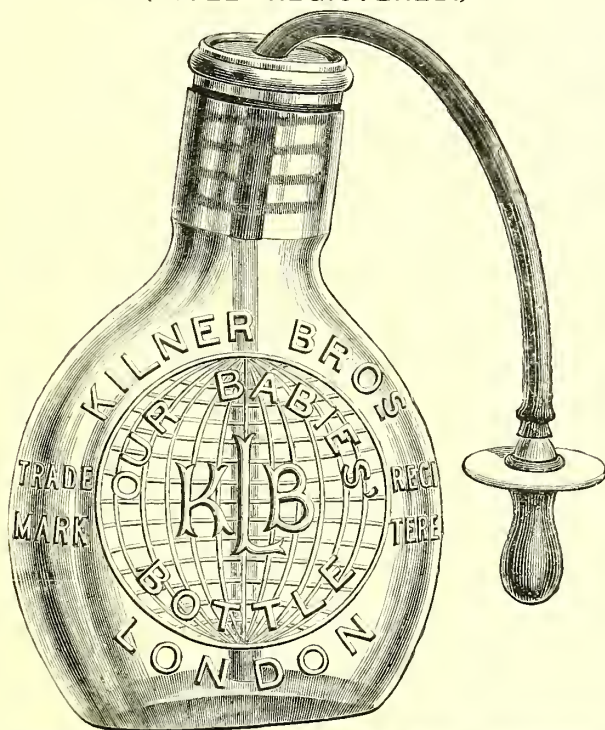
Established 60 years.

Bankers—London and Westminster Bank.

FEEDING BOTTLES.

“Our Babies’ Bottle.”

(TITLE REGISTERED.)



PRICES:

With Black Rubber Tubes and Seamless Teats and Wood Unions.

Each Bottle in a Cardboard Box.

Glass Unions 1/6 per gross extra.

Small lots. 2-gross lots. 5-gross lots

Green Bottles {	AND SCREW STOPPERS	44/-	43/-	42/6
White „		47/-	46/-	45/6
PER GROSS.				

Bottle and Tube Brushes 3/6 per gross extra.

If in Partitioned Wood Boxes of 1 doz.,

4/- per gross less.

TERMS: Net.

Free on Rails in London.

Carriage charged forward.

Special Lettered Bottles
made to order
for large buyers.

WHOLESALE DRUGGISTS' DISPENSING & OTHER BOTTLES

IN LARGE VARIETY OF SHAPE AND SIZE.

Samples and further information on application to

Kilner Brothers, Ltd.

No. 3 G.N. Goods Station, King's Cross, London.

BRITISH MANUFACTURED CASTOR OILS

GUARANTEED PURE.



REGISTERED TRADE MARK

PURE TASTELESS COLD DRAWN PHARMACEUTICAL.

This Oil is guaranteed absolutely Cold Drawn, and is of exceptional brilliancy and purity.

PURE FIRSTS.—This Oil is an expressed oil of very high quality.

PURE SECONDS.—This Oil is manufactured by our own patent process, and is a pure and economical Oil for lubricating or other purposes.

The Hull Oil Manufacturing Company, Limited, are amongst the largest manufacturers of Seed Oils in the world, and have the best and costliest plant for the manufacture and preparation of Castor Oils.

The Hull Oil Manufacturing Company, Limited, Hull, England.

BOXES

ROUND, OVAL, SQUARE, or FOLDING, for the
DRUG, DRYSALTERY, AND CONFECTIONERY TRADES.

LABELS, WHEN PRINTED TO OUR INSTRUCTIONS, WE PUT ON PILL
AND OTHER BOXES FREE OF CHARGE.

BOXES AND CASES FOR

Baking Powder, Black Lead, Bottles, Camphor Ball, Capsules, Castor Oil, Cough Lozenges, Dispensing Powder, Eye Ointment, Fancy Boxes, Fuller's Earth, Folding Boxes, Glass Top Outers, Homœopathic Bottles, Insect Powders, Ink Cases, Jewellery, Lozenge, Lip Salve, Magnesia, Metal Paste, Marking Ink, Nipple Shields, Night Lights, Parcel Post, Pastilles, Pills, Potash Tablets, Plasters, Salt Lemon, Seidlitz Powder, Starch Gloss, Soaps, Soda Powder, Syringes, Tapers, Tooth Powder, Violet Powder, &c.

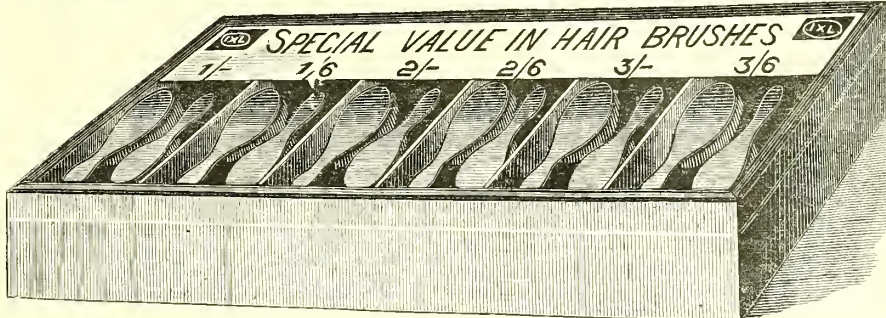
ROBINSON & SONS, LIM., WHEATBRIDGE MILLS & CHESTERFIELD,
HOLMBROOK WORKS,
And 55 FANN STREET, ALDERSGATE STREET, LONDON.

REPEATED BY REQUEST.

We have so many inquiries for details of our "Three Salesmen," as one of our friends terms them, that we subjoin particulars.

HAIR BRUSHES.—Complete with Brushes, 45/4 net.

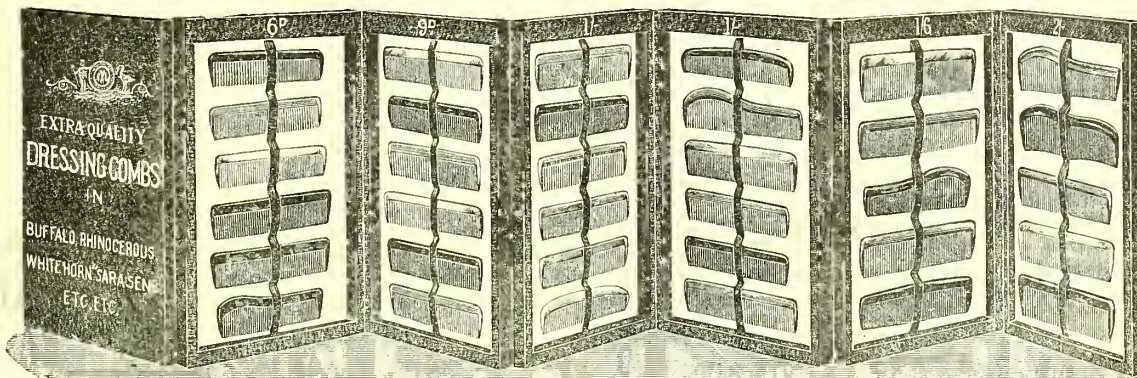
Each Case contains one-third doz. each good value Hair Brushes, assorted patterns, at 9/-, 13/-, 18/-, 22/-, 27/-, 32/- per doz., which, with the half cost of case (5/-), amounts to 45/4.



Case is made of good sound wood and stout glass, and, when placed before a customer, does its work well and quickly. Often a lady comes in for a 1/- Brush, and goes out with a 2/6 one.

Priced 1/6, 2/-, 2/6, 3/3, 3/9, 4/6, if wished, for Export. Case itself (being below cost) is not sold empty.

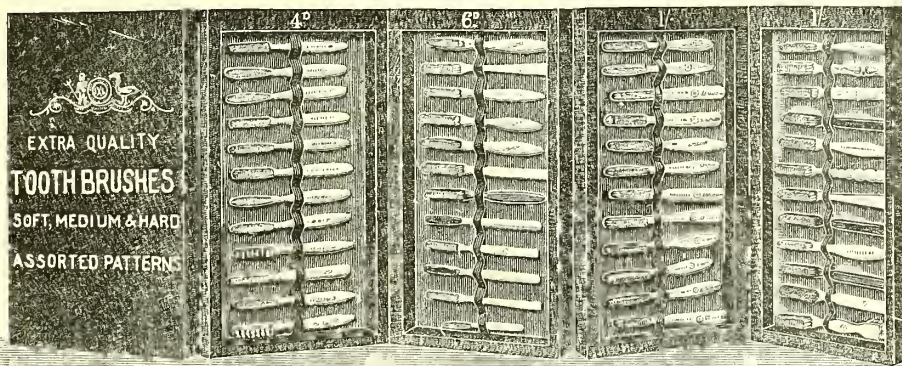
COMB CASE.—Complete with 3 doz. Assorted Combs, 35/6 net.



Gold Blocked, 9d., 1/-, 1/6, 1/6, 2/-, 2/6, or any way wished for Export. This folds up like a book, occupying scarcely any room. When opened out displays $\frac{1}{2}$ doz. 6d. Combs, 4/- doz.; $\frac{1}{2}$ doz. 9d., 6/- doz.; 1 doz. 1/-, 8/- doz.; $\frac{1}{2}$ doz. 1/6, 12/- doz.; $\frac{1}{2}$ doz. 2/-, 16/- doz., making a total (including case, 7/6) of 35/6. Case itself (being sold under cost) is not supplied empty.

TOOTH BRUSH CASE.—Complete with 4 doz. Tooth Brushes, 28/9 net.

No more soiled Tooth Brushes, no bother, trouble, or worry in handing a customer brush after brush.



Folds like a book, but when opened out, displays 48 different Brushes, thus giving the buyer a good choice, and saving the Chemist's time.

Priced (if required) 6d., 9d., 1/3, 1/3, or for Export. Folds up like a book. When opened, displays 1 doz. 4d. Brushes, 2/9 doz.; 1 doz. 6d., 4/- doz.; 1 doz. Ordinary 1/-, 6/6 doz.; 1 doz. Special 1/-, 8/- doz. Case itself, 7/6. Total, 28/9. Case itself (being below cost) is not supplied empty.

AYRTON & SAUNDERS, — 34 — HANOVER ST., LIVERPOOL

SAVARESSE'S CAPSULES

Being made of membrane are free from all the objections to Gelatine Capsules.

By private agreement these are not sold below fixed minimum rates, thus securing a good profit to the retailer.

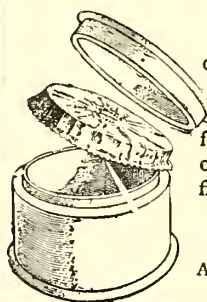
SAVARESSE'S CAPSULES consist of an organic membranous envelope of two separate but adhering layers, so prepared as to resist the *acid* juices of the stomach. The Capsule does not burst until it is dissolved by the *alkaline* juices of the intestine. The consequence is, no nausea is felt, nor is the stomach uselessly fatigued by medicines intended to act on other organs.

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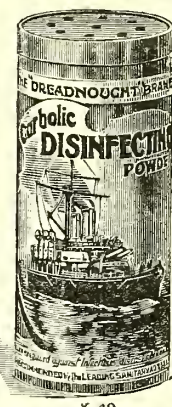


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Bland's Pills,	Vaseline,
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SPECIAL DESIGNS PRODUCED.

X49.—Carbolic Disinfecting Powder, 24/- per gr.
" " FILLED, 2 lbs. each 45/- "

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Quotations for all Tins FILLED.

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(ESTABLISHED 1877.)

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GLYCERINATED CALF.

DIRECTIONS FOR USE.—Scratch the arm with the point, push off the capsule, and rub off the diaphragm upon the arm when rubbing in the vaccine.

g Glass head; *r* Recess for the vaccine;
d Metal diaphragm; *c* Metal capsule sealed with paraffin wax.



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THE C.P.P.
PATENTED.

Sample Free.

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"DARQUE LONDON."

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This instrument, sufficient alone for an aseptic vaccination with Glycerinated Calf Vaccine, supersedes the use of tubes and their necessary auxiliaries. From Feb. 1, 1899, to August 29, 1900, inclusive, 385 Adults, vaccinated only in childhood, were revaccinated by the Divisional Surgeon of the A Division of Metropolitan

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TOOTH BRUSHES

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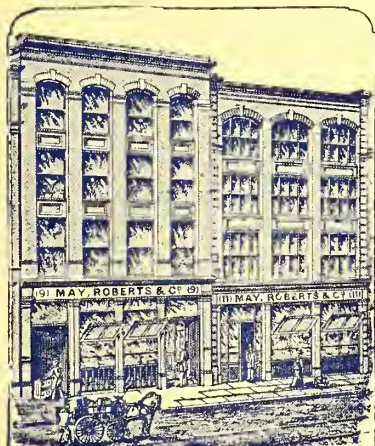
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Maw's Superior Hospital	. 1/8		.	.	1/6
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<i>Improved, Absorbent</i>			.	.	
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